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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

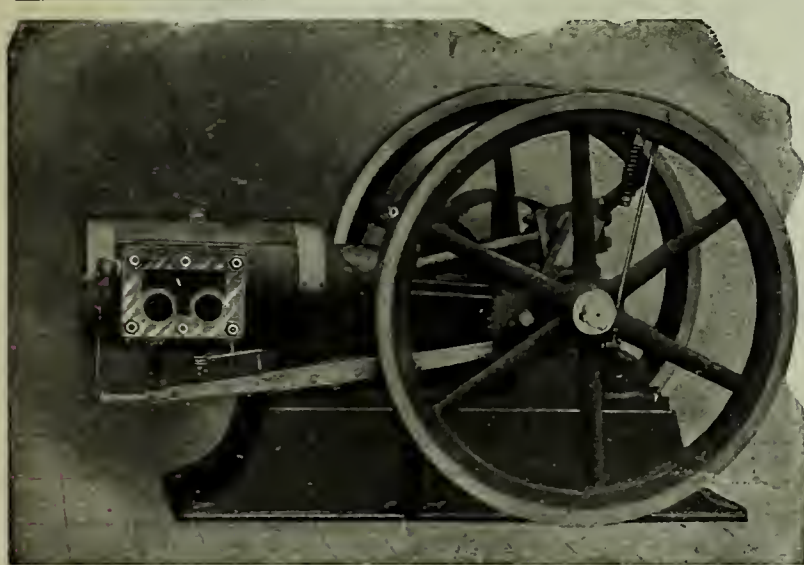
PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XIX.

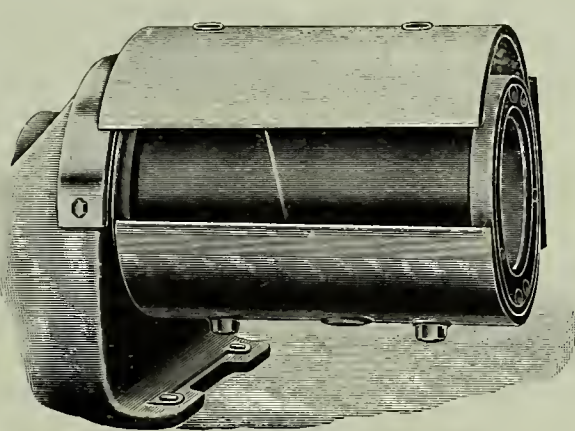
CHICAGO, ILLINOIS, NOVEMBER 15, 1900.

No. 5.

ONE DOLLAR PER ANNUM.
SINGLE COPY, TEN CENTS.



Simplest Engine Built.



Davis Patent Detachable Water Jacket.

Write for Catalog

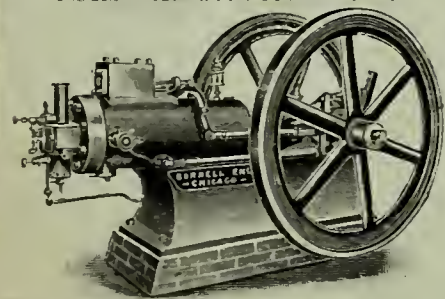
Describing a thoroughly
high grade engine combin-
ing the most modern im-
provements.

On the market eight years.
Thousands in use.

Successfully Used by Largest Elevator Lines in the Country

OMAHA, NEB. DAVIS GASOLINE ENGINE WORKS CO., WATERLOO, IOWA.

The BURRELL ENGINE
USES GAS OR GASOLINE.



THERE IS NOTHING BETTER.
Quality High. Price Low

SKILLIN & RICHARDS MFG. CO.,

241-247 So. Jefferson St., CHICAGO,

MANUFACTURE AND FURNISH

Modern Appliances

For elevating and conveying grain and like commodities.

ROPE, BELT AND CHAIN TRANSMISSION.

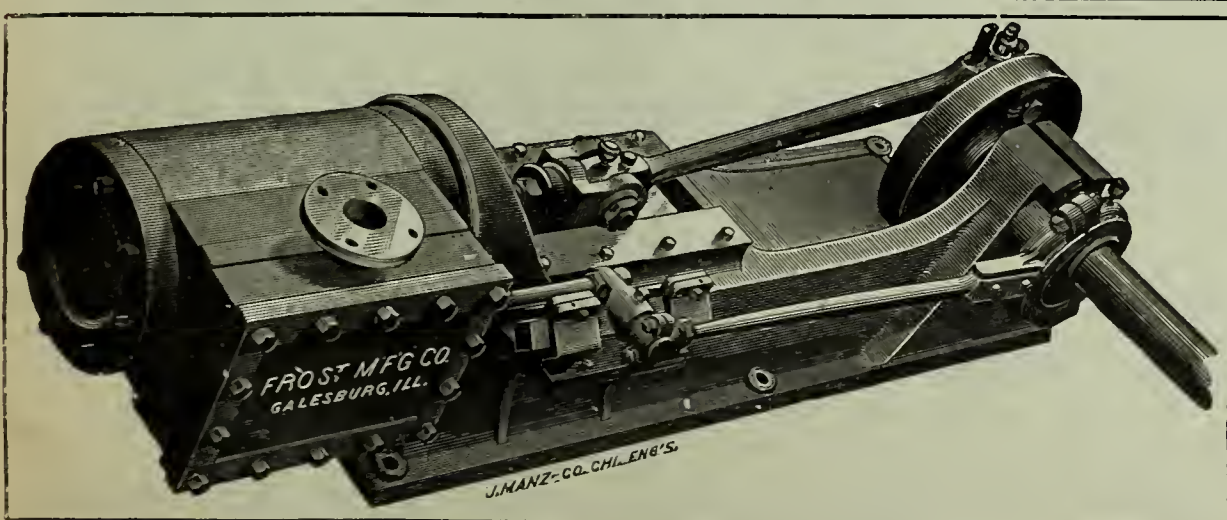
COMPLETE OUTFITS FOR LARGE OR SMALL GRAIN ELEVATORS.

"SALEM BUCKETS."
EVERYBODY KNOWS THEM.
EVERYBODY USES THEM.



Send for our catalogue.

Write us for prices.



FOR PRICES AND DISCOUNTS
—ON—
Elevator Machinery
AND SUPPLIES
—OF—
Every Description,
EITHER STEAM OR HORSE-POWER,
ADDRESS
THE FROST MFG. CO.,
GALESBURG, ILL.

A Man with an Engine

Can earn good money all year with one of the

CORN BELT GRINDERS,

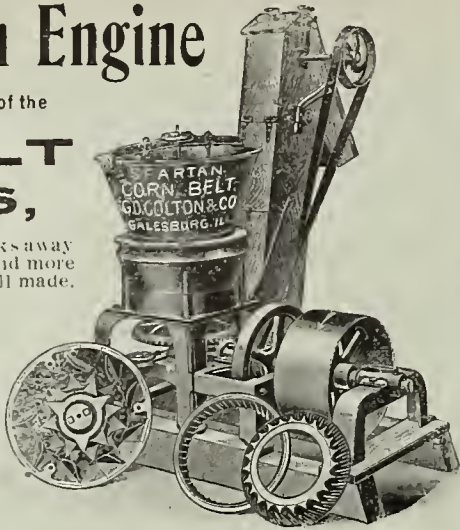
The greatest mill you ever saw. It walks away from all of 'em. We guarantee it to grind more corn per horsepower than any other mill made. It's all in the grinders—they save all friction by cutting the cob instead of crushing it.

3 to 16 H. P.

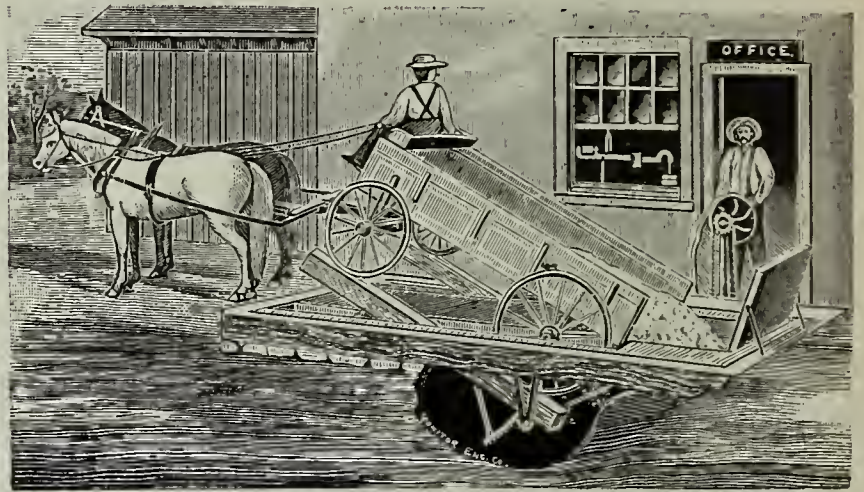
Will grind ear corn, husks and all, or grain of any kind.

Send for catalogue and price list.

G. D. COLTON & CO.,
Galesburg, Ill.



Gold Dollars



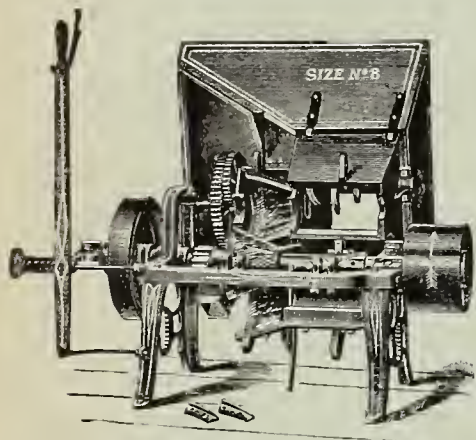
The Best All-Around Feed Mill

Highest Award World's Fair.

Gold Medal Atlanta, Gold Medal at Omaha.

For crushing ear corn and grinding all kinds of small grain. Different from all other mills. The conical burrs are light running and ahead of rolls or stones in speed and quality of work. Has self-feeder for ear corn and every convenience belonging to a first-class modern feed mill. Will grind Kaffir corn in the head. Sold with or without bagging attachment. Made in seven sizes, ranging from 2 to 25 h. p. Improved for this season.

GET OUR LATEST CIRCULAR.
IT'S WORTH EXAMINING.



N. P. Bowsher Co., South Bend, Ind.

At FIFTY CENTS apiece are CHEAP, but they do not represent a better investment than we offer the "elevator and grain trade" in our

Controllable Wagon Dump.

WINCHESTER, ILL., February 4, 1896.

MESSRS. SAVAGE & LOVE CO., Rockford, Ill.

GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

Yours truly,
M. C. WOODWORTH.

MANUFACTURED ONLY BY

THE SAVAGE & LOVE CO., Rockford, Ill.

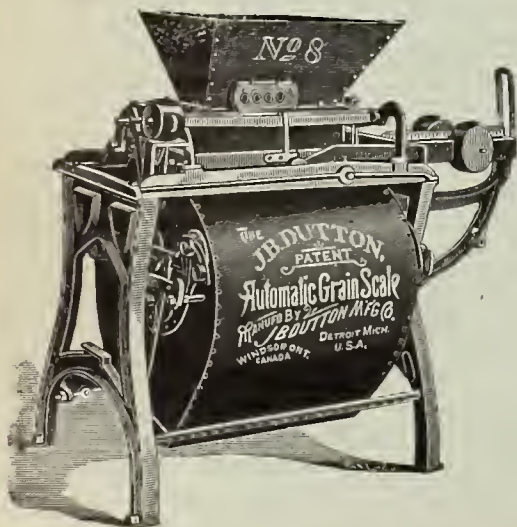
FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

Grain Dealers' and Shippers' Gazetteer.

PRICE
REDUCED
FROM
\$2 TO \$1.

CONTAINS freight agents' official list of flouring mills, elevators, grain dealers, shippers and commission merchants, located on all the principal railroads in the United States and Canada. Also contains the grading and inspection rules of leading markets. This is the handiest and most complete list of the kind published. If you do business in this line, you can scarcely afford to be without it. This 1899-1900 edition contains over 200 large pages, in a durable cloth binding. Sent postpaid on receipt of \$1.00.

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J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN

ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

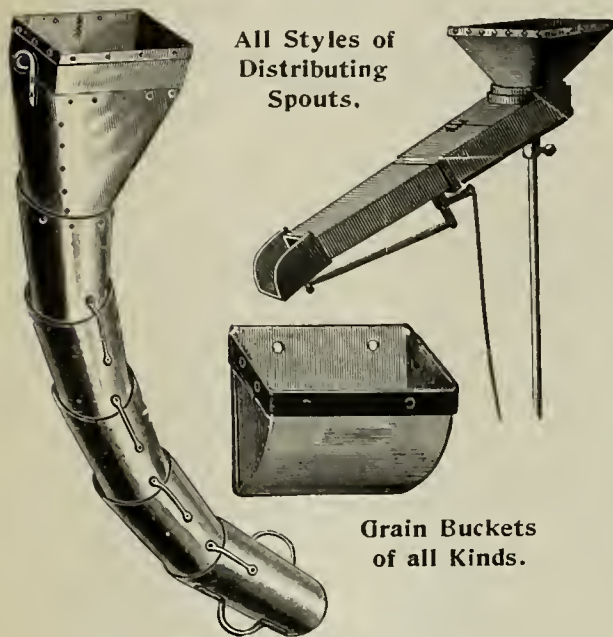
ACCURATE AND RELIABLE AT ALL TIMES. SCALES SENT ON 30 DAYS' TRIAL.
SEND FOR CIRCULAR AND PRICE LIST.

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EVERYTHING IN THE LINE OF MILL AND ELEVATOR MACHINERY AND SUPPLIES.

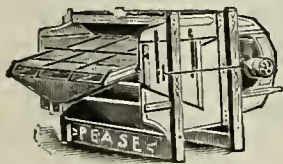
SEND IN YOUR SPECIFICATIONS AND WE WILL QUOTE YOU PRICES. GENERAL CATALOGUE FREE.



All Styles of
Distributing
Spouts.

Grain Buckets
of all Kinds.

Flexible Spouts, Any Size or Length.

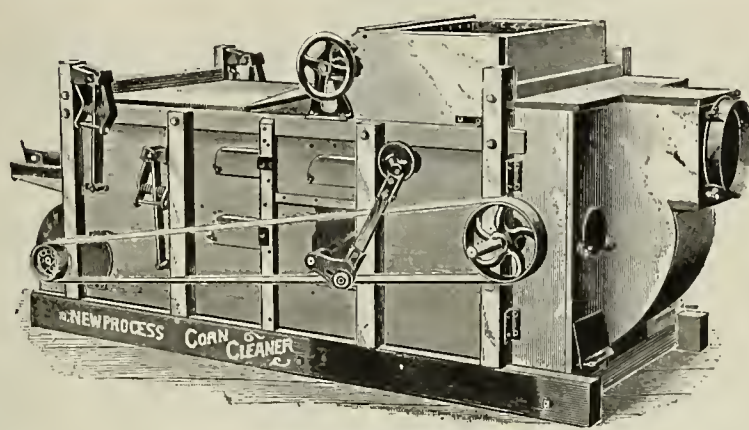


Fanning Mills and Warehouse Separators.

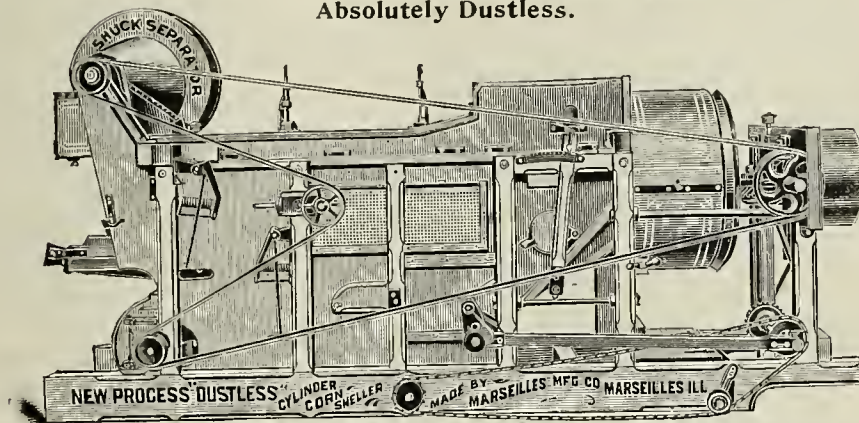
Pulleys,
Shafting,
Hangers,
Gearing,
Pillow Blocks,
Set Collars,
Sprocket Wheels,
Chain, Rubber, Cotton
and Leather Belt.

Power Transmitting Appli-
cances of Every Description.

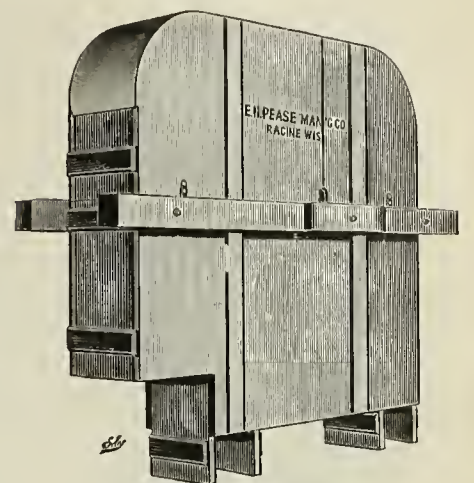
SHEET-STEEL WORK A SPECIALTY.



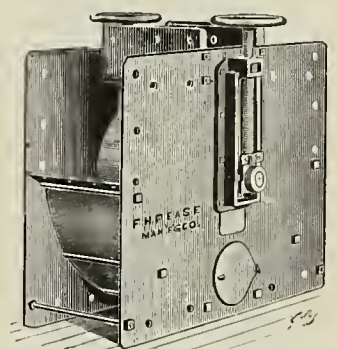
Easily Adjustable, Lightest Running,
Absolutely Dustless.



New Process Corn Shellers and Cleaners, furnished either as
Combined or Separate Machines, also with or without
Husk Separating Attachment.



Elevator Heads,
Mechanically Perfect.

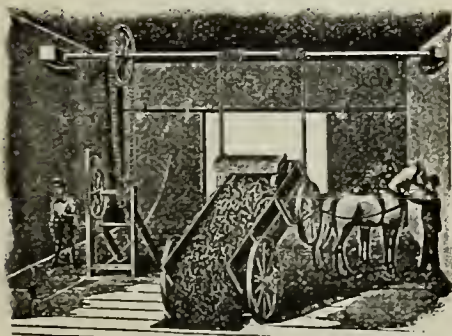


Elevator Boots, All Styles,
Wood, Steel or Cast Iron.

MARSEILLES MANUFACTURING CO.,
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SMITH'S

Automatic Warehouse and Elevator Machinery.



I have given the building of Warehouse and Elevator Machinery my special attention for the past thirty years and claim to furnish the most complete, convenient and labor saving machinery that can be constructed, and will furnish plans and specifications on application for a complete automatic warehouse.

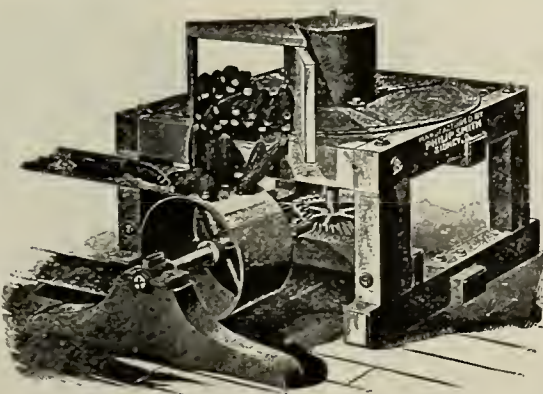
The accompanying cut is an exact representation of my

Latest Improved Overhead Dump

Which can be operated with ease, safety and speed, and we think that you will find that this dump embodies all the features required, without an objectionable point, and is within the reach of all grain men. This dump can be placed on a level floor, and is so constructed by a double gear that it can be operated by a boy.

THE MARQUIS PATENT Ear Corn Elevator and Sheller Feeder.

Feeder will feed corn from the dump to the elevator or sheller with or without drag belt. Will feed 100 to 1,500 bushels per hour without any attention. Can be regulated to the capacity of the sheller or elevator while in operation. Can be made to feed either sheller or elevator by changing reverse board. It is made of iron and is very durable. It will last a lifetime. Can be applied to dump now in use at very little expense. We have over 5,000 of these machines in use that are giving universal satisfaction. Prices furnished on application.



Agents Wanted to Sell Our Full Line of Corn
and Elevator Machinery.

PHILIP SMITH, Sidney, Ohio.

Paine-Ellis Grain Driers

Are more largely used on this continent than all others combined, because they are the only machines that will handle with equal facility grain containing 50 per cent moisture to that simply damp and musty. These machines will operate successfully and rapidly at a temperature as low as 110 degrees. Practical millers and elevator men will appreciate this. It is one thing to kiln dry and another to put every kernel of grain into its normal condition by Nature's own method. *We can do it.*

For Particulars
Address

**The Paine-Ellis
Grain Drier Co.,**

53 CHAMBER OF COMMERCE, MILWAUKEE, WIS.

If You Are a Handler of Barley, Malt or Oats, THESE MACHINES ARE INDISPENSABLE.

A FEW OF THE USERS; READ THEM OVER CAREFULLY:

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WALTER BROS. BREWING CO., Menasha, Wls.
BOOR & CO., Ashton, Iowa.
WILLIAM HILL, Holstein, Iowa.
ALTON MILLING CO., Alton, Iowa.
TILSON CO., LTD., Tilsonburg, Ont.
SCHNECKLOTH & SONS, Holstein, Iowa.
MUSCATINE OAT MEAL CO., Muscatine, Iowa.
STOBIE CEREAL CO., St. Louis, Mo.
PAUL HUEFNER, Fountain City, Wis.
HASTINGS MALTING CO., Hastings, Iowa.
MANKATO MALT & GRAIN CO., Mankato, Minn.
ANCHOR GRAIN CO., Grogan, Minn.
VAN VLIET MALTING CO., Newark, N. J.
MARFIELD ELEVATOR CO., Winona, Minn.
H. M. MIRICK, Palmyra, N. Y.
ALBERT SCHWILL CO., Chicago, Ill.
GREGG MALTING CO., Oneida, N. Y.
D. ROTHSCHILD GRAIN CO., Davenport, Iowa.
A. W. HARRIS GRAIN CO., Sibley, Iowa.
CEDAR FALLS MILLING CO., Cedar Falls, Iowa.
SIOUX MILLING CO., Sioux City, Iowa.
M. T. DILL, Prescott, Wis.
D. H. STUHR GRAIN CO., Davenport, Iowa.

LARSON & SWANSON, Bay City, Wis.
DAVID STEVENSON BREWING CO., Oswego, N. Y.
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JOHN C. WHITE, Buffalo, N. Y.
C. B. TILLINGHAST, Albany, N. Y.
KENTUCKY MALT & GRAIN CO., Louisville, Ky.
ANDREW G. WHITE, Albany, N. Y.
SPENCER GRAIN CO., McGregor, Iowa.
HUNTING ELEVATOR CO., Prairie du Chien, Wis.
F. KRAUS & CO., Milwaukee, Wis.
HENRY RIPPE, Grand Meadows, Minn.
W. G. McCUTCHEON, Kasson, Minn.
W. S. GARGILL CO., La Crosse, Wis.
MINNEAPOLIS BREWING CO., Minneapolis, Minn.
WEIDEMAN BREWING CO., Cincinnati, O.
D. A. McDONALD CO., Cannon Falls, Minn.
NORTON & CO., Lockport, Ill.
KANSAS CITY OAT MEAL AND CEREAL CO., Kansas City, Mo.
DYSART GRAIN CO., Buffalo Center, Iowa.
RIVERSIDE ROLLED OATS CO., Riverside, Iowa.
INDIA WHARF BREWING CO., Brooklyn, N. Y.
MINNESOTA MALTING CO., Redwing, Minn.
AMERICAN MALTING CO. use 75 of them in their various houses.

We also make a complete line of power separators and oat clippers. Our new catalogue is now out and we would like to send you a copy. Postal card us.

INVINCIBLE GRAIN CLEANER COMPANY, Invincible Works, Silver Creek, N. Y.

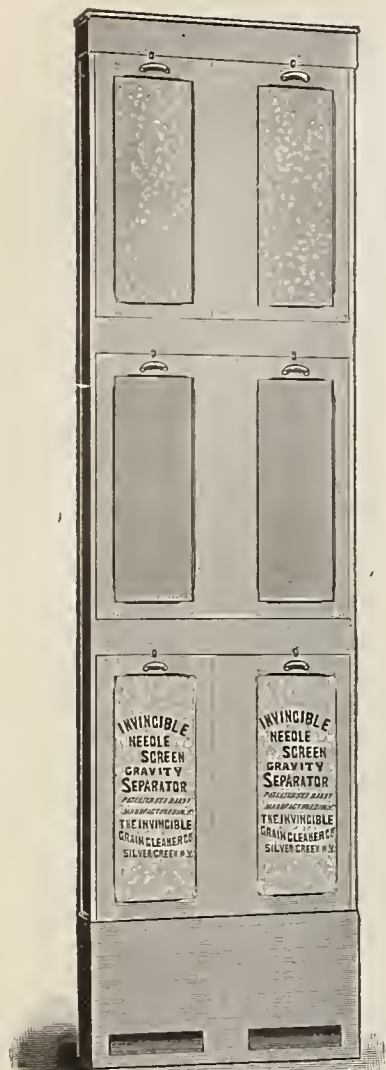
REPRESENTED BY

W. J. Scott, Wyoming Hotel, Chicago, Ill.

Chas. H. Scott, Nicollet Hotel, Minneapolis, Minn.

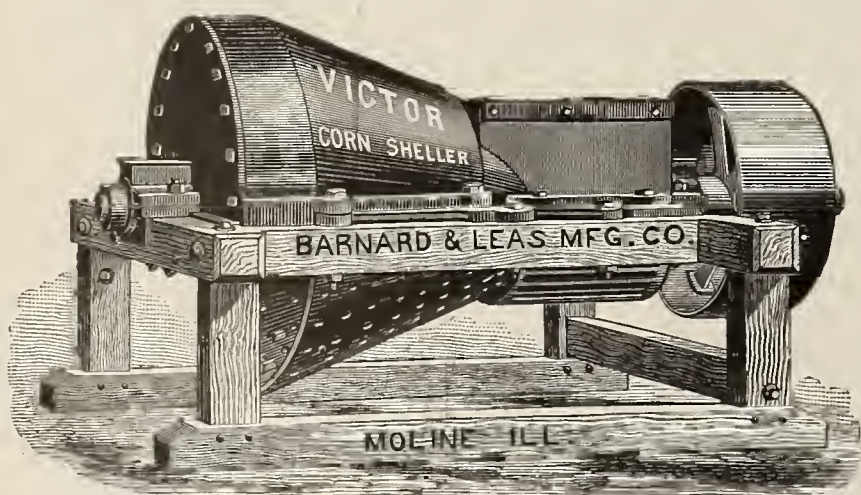
Edward A. Ordway, 512 Exchange Bldg., Kansas City, Mo.

J. N. Bacon, Blacherne Block, Indianapolis, Ind.



INVINCIBLE NEEDLE SCREEN
GRAVITY SEPARATOR.

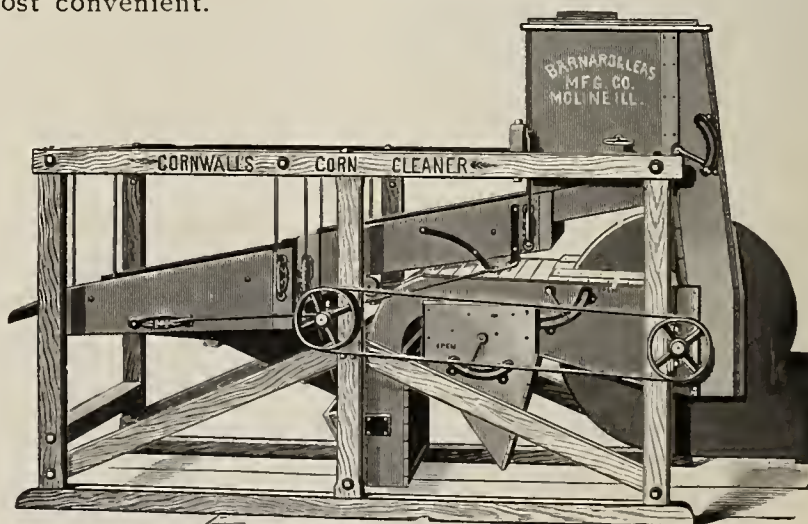
The Best of Their Kind.



The Victor Corn Sheller possesses unequalled capacity, strength and durability. It has a patent automatically acting feeder, which allows the machine to be run either way without crossing the belt. Is easily adjusted to suit conditions of corn. It will not clog. Can be stopped and started regardless of quantity of corn in hopper or dump and can be set in any manner most convenient.

Cornwall Corn Cleaner cleans corn cleaner with one operation than any other machine. Saves screenings for feed. Is dustless, light running and durable. Use it and your corn will never grade dirty.

ALL INQUIRIES WILL BE CHEERFULLY AND
PROMPTLY ANSWERED.



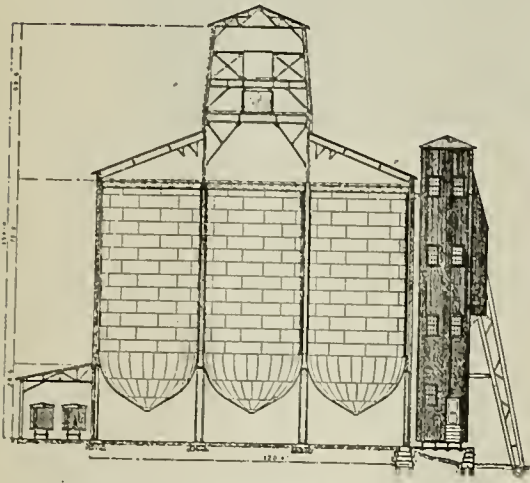
BARNARD & LEAS MFG. CO., MILL BUILDERS AND MILL FURNISHERS, **MOLINE, ILL.**

AGENTS: W. H. CALDWELL, Room 1117 Royal Insurance Bldg., Chicago, Ill. BARNARD MACHINERY CO., Enterprise, Kan., for Kansas and Oklahoma. M. M. SNIDER, 411 East 12th St., Des Moines, Ia. WILLFORD MFG. CO., 303 South Third St., Minneapolis, Minn. ELI STRONG, Kalamazoo, Mich. C. E. MANOR, Stanleyton, Pa. R. C. STONE, Springfield, Mo. WILLIAM EBERT, 2246 Baxter Avenue, Louisville, Ky.

Riter-Conley Mfg. Co., THE AUTO-SPARKER

MANUFACTURERS, ENGINEERS, CONTRACTORS.

Grain Elevators of Steel,
ALSO
Gas Holders with Steel Tanks.



Cross section of Great Northern Elevator furnished by us at Buffalo, N. Y. Three million bushels' capacity. Steel throughout.

Water and Oil Tanks,
Steel Buildings,
Steel Stacks and
Steel Construction of
Every Description,

Designed,
Furnished and
Erected in
All Parts of the World.

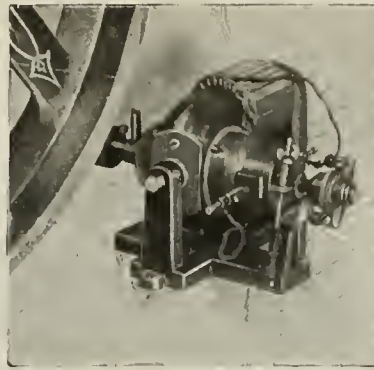
General Office, Water Street, Pittsburg.

Plate, Tank and Boiler Works, First, Second and Third Aves.

Structural Works, Preble Avenue, Allegheny City, Pa.

New York Office, 39 and 41 Cortlandt Street.

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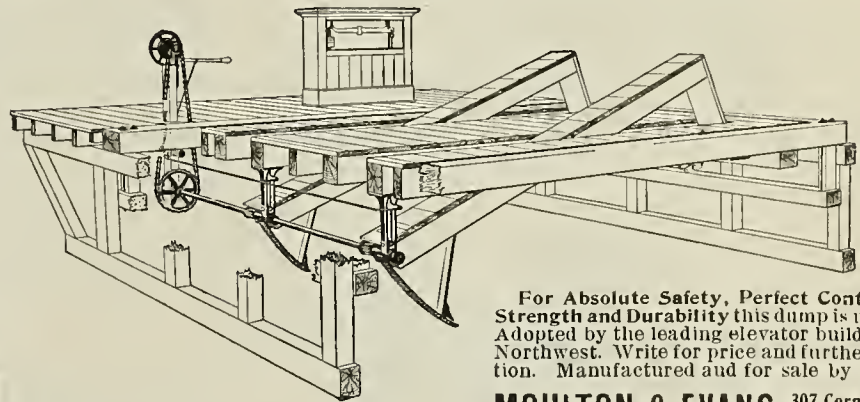


1. Starts and runs gas engines as easily as best batteries.
2. Does not burn up electrodes.
3. Machine is durable, nothing to wear out but shaft and friction pulley and these should last for years.
4. Saves its entire cost over batteries in one year.
5. Hundreds in use. Every machine tested and guaranteed to do the work claimed.
6. Automatic governor regulates speed of dynamo, no matter what size or speed the fly-wheel of engine.
7. **You need no battery.** Auto-Sparker can be fastened to floor, as in cut, or on body of gas engine or automobile.

DIMENSIONS: $10\frac{3}{4} \times 10 \times 6\frac{3}{4}$ inches. Weight, 23 pounds. Made for either touch or jump spark. For particulars, address

MOTSINGER DEVICE MFG. CO., PENDLETON, INDIANA,
Or any Gas Engine Manufacturer.

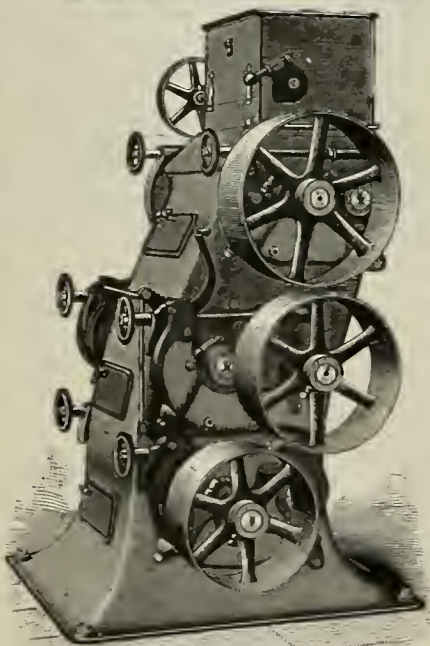
THE EVANS WAGON DUMP.



Patented
April 12,
1898.

For Absolute Safety, Perfect Control, Great Strength and Durability this dump is unequalled. Adopted by the leading elevator builders of the Northwest. Write for price and further information. Manufactured and for sale by

MOULTON & EVANS, 307 Corn Exchange, Minneapolis, Minn.



3-PAIR-HIGH, SIX-ROLLER MILL.

CUSTOM WORK!

UTILIZE YOUR POWER
BY OPERATING A GOOD MILL FOR GRINDING

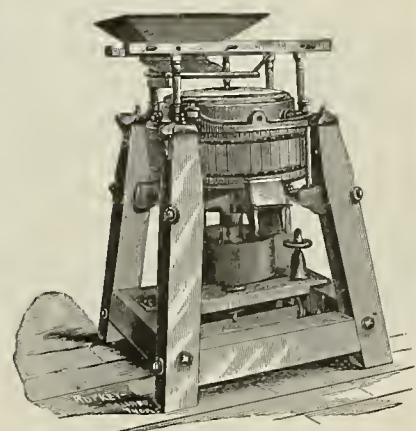
...FEED AND MEAL...
— IT PAYS —

WE MANUFACTURE
THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.
THREE-PAIR HIGH, SIX-ROLLER MILLS, 4 Sizes.
TWO-PAIR HIGH, FOUR-ROLLER MILLS, 5 Sizes,

...And...

PORTABLE FRENCH BUHR MILLS,
85 Sizes and Styles.

SEND FOR BOOK ON MILLS.



VERTICAL
UNDER RUNNERS,
UPPER RUNNERS,
PULLEY AND GEAR DRIVES.

ELEVATOR SUPPLIES AND POWER CONNECTIONS.

ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

DUST COLLECTORS (Tubular, Automatic).

CUPS.

We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our $3\frac{1}{2} \times 3$ inch, list price 9c., has as much capacity as others $3\frac{1}{2} \times 3\frac{1}{2}$ inch, list price 10c. Our prices are right

CORRESPONDENCE SOLICITED.

NORDYKE & MARMON CO., INDIANAPOLIS, INDIANA, U. S. A.

FLOURING MILL ENGINEERS, IRON FOUNDERS AND MACHINISTS. ESTABLISHED 1851.

GRAIN ELEVATOR MACHINERY OF LATEST TYPES.



View shows six, and part of the seventh car, in train just leaving the factory of the Dodge Manufacturing Co., Mishawaka, Ind., loaded with shafting, bearings, rope sheaves, ship shovels, winch, marine leg, leg pusher, car puller, belt conveyors, and trippers necessary for use in the new grain elevator of Botsford Jenks Co., Meaford, Canada.

The following Grain Elevators, under construction or in operation, are among those recently equipped:

Illinois Central R. R., New Orleans, La.,	- capacity, 1,200,000 bu.	Electric Steel Elevator, Buffalo, -	- - - capacity, 1,200,000 bu.
Northern Grain Co., Manitowoc, Wis.,	- " 1,200,000 "	McReynolds & Co., Hammond, Ind.,	- - " 2,000,000 "
Northern Grain Co., Council Bluffs, Ia.,	- " 750,000 "	Calumet Elevator Co., South Chicago, Ill.,	- " 1,200,000 "
Botsford & Jenks, Meaford, Ont.,	- " 1,000,000 "	Rosenbaum Bros., South Chicago, Ill.,	- " 1,000,000 "
Chicago Dock Co., Chicago, Ill.,	- " 1,000,000 "	Peavey Grain Co., South Chicago, Ill.,	- " 1,500,000 "
D. H. Stuhr Grain Co., Hammond, Ind.,	- " 600,000 "	Chicago-O'Neill Grain Co., South Chicago, Ill.,	- " 750,000 " etc., etc., etc.

Have the Largest Factory in the World Exclusively Devoted to the Manufacture of Power Transmitting Machinery.

THE DODGE MANUFACTURING CO.,
Engineers, Founders, Machinists. *Mishawaka, Ind.*

Branches: BOSTON, NEW YORK, CINCINNATI, CHICAGO, ATLANTA, LONDON, ENG.

The most scientific in construction. The most practical in operation.

THE EUREKA IMPROVED OAT CLIPPER.

It outclasses all others, not only in quality but in economy of work.

ARMOUR ELEVATOR CO.,
 Room 712, 205 La Salle St.

CHICAGO, Sept. 24, 1900.

Mr. B. F. RYER, General Western Manager, The S. Howes Co., 11 Traders' Bldg., Chicago.

DEAR SIR:—Having given your Improved Eureka Oat Clipper a fair trial at our Minnesota Elevator, we beg to state that the machines are fully up to, even surpass any expectations we had. Your promises and guarantees have been fully carried out.

The machines easily have a capacity of 2,000 bu., and can, if desired, be made to handle 2,400 bu. per hour; and we can say that we would have no hesitancy in recommending the Eureka Clippers.

Yours truly, ARMOUR ELEVATOR CO.

Capacity
 from 100 bushels to
 2,400 bushels
 per hour.

THE IMPROVED EUREKA CLEANERS

Are worthy of close investigation. Write for particulars.

THE S. HOWES CO.,
EUREKA WORKS, *Est. 1856.* *SILVER CREEK, N. Y.*

Duplicate parts of all Eureka machines built, from the time of Howes, Babcock & Co. in 1856 until the present.

J. N. HEATER, Baltimore Hotel,
 Kansas City, Mo.

B. F. RYER, Gen. Western Mgr., 11 Traders' Bldg., Chicago, Ill.

W. E. SHERER, 5 Chamber of Commerce,
 Minneapolis, Minn.



"Western" Warehouse Sheller.

SOLE MANUFACTURERS

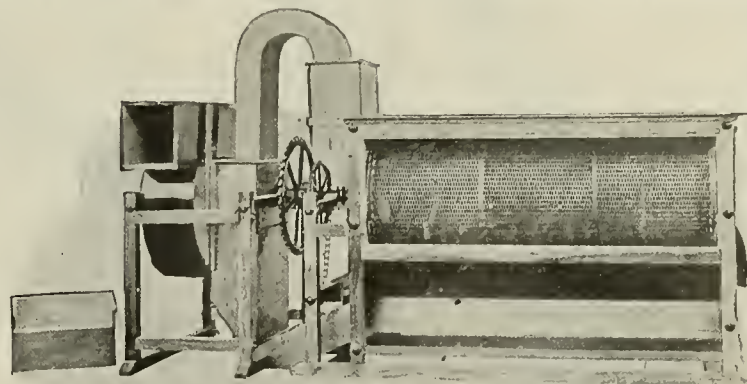
"Western" Shellers and Cleaners, BEST ON EARTH.

Complete Elevator Equipments our Specialty.

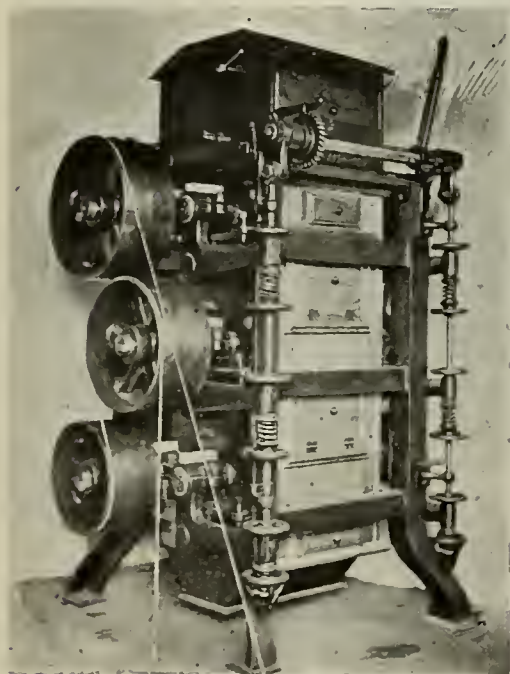
UNION IRON WORKS, DECATUR, ILL., Grain Elevator Contractors and Builders.

Plans for Grain Elevators Made, on application, by licensed architect.

Write for Catalog.



"Western" Warehouse Cleaner.



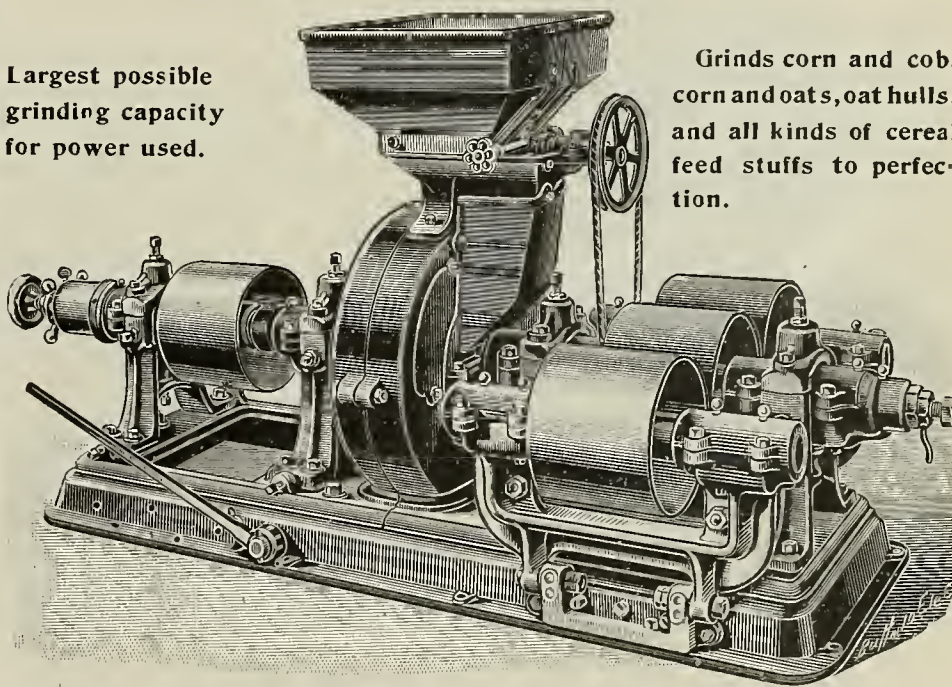
The Minneapolis Four and Six Roll Corn and Feed Mill

Is built with noiseless gears, or belt drive for slow rolls, if so desired. It is easy to handle; a boy can run it. Lever can be used for fine or coarse grinding, or each pair of rolls can be adjusted independent of lever movement. Rolls cannot get out of parallel line, therefore does better work, grinds more and lasts longer. Mill has shake feeder and steel separator combined. Will be sold on 30 days' trial. Send for circular to

FRED ZOLLNER & CO., 2435 Twenty-Eighth Ave. S., Minneapolis, Minn.

FEED GRINDING PAYS, *Especially if you do it on a* MONARCH ATTRITION MILL.

Largest possible
grinding capacity
for power used.



Grinds corn and cob,
corn and oats, oat hulls,
and all kinds of cereal
feed stuffs to perfec-
tion.

Requires Less Than One Minute to Open It.

This Monarch of the Grinding World

Will attract customers for you and place you beyond competition in the matter of capacity and expense. No burr stones to be re-dressed. Ball-bearings and self-oiling boxes reduce power, wear and attention required to the minimum. No twist belts necessary with our special drive, which reduces cost of installing.

We build a complete line of Attrition and Burr Mills. You can't ask us too many questions about them. Send for catalog.

SPROUT, WALDRON & CO., Muncy, Pa.

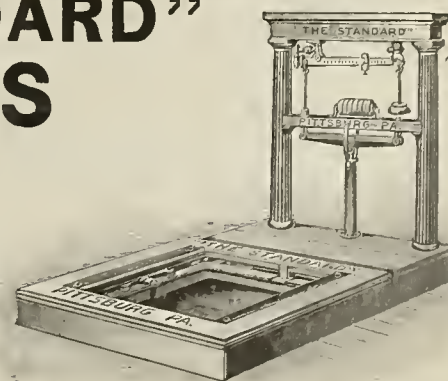
"THE STANDARD" SCALES

—FOR—

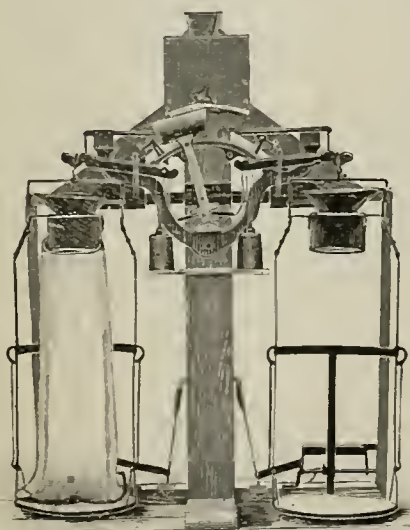
Grain Elevators, Flour Mills,
AND ALL PURPOSES.

Recent Contracts:
Great Northern Ry. Elevator, eighteen
1,600 bu. Hopper Scales.
Baltimore & Ohio Ry. Elevator, ten
1,400 bu. Hopper Scales.

THE

Standard Scale & Supply Co.,
LIMITED,
Manufacturers, PITTSBURGH, PA.

Cutler Bagging Scale



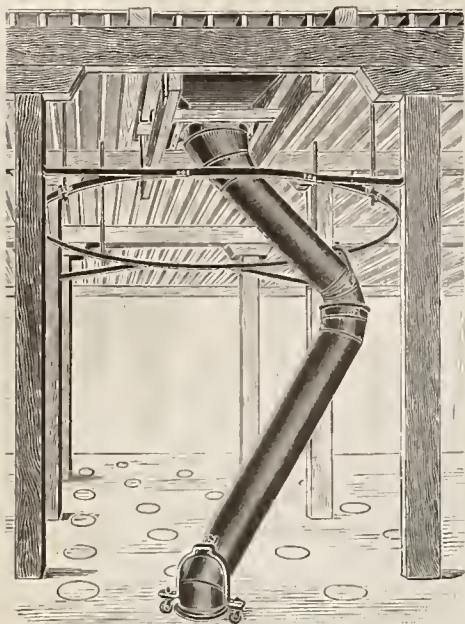
For weighing Grain, Meal,
etc., Automatically, in even
weight packages.

Two
Scales in
One Frame

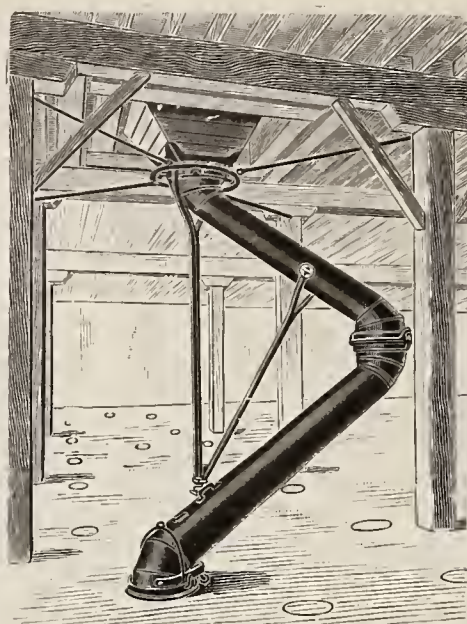
Operated by one man. Ac-
curate, economical

Not an experiment. In suc-
cessful use 10 years.

THE CUTLER CO., North Wilbraham, Mass.



TROLLEY SPOUT.



STANDARD SPOUT.

D. A. ROBINSON'S Universal Distributing Spouts,

755-765 TEMPLE COURT, MINNEAPOLIS, MINN.

The Adjustable Elevator Dump.



LOW-WHEEL WAGON ON DUMP.

WE claim superiority over all other dumps in giving all wagons enough pitch so that the grain will leave the bed freely, and in letting them down in the dump easily. They occupy less space, and can be placed on all sill dumps now in use without changing trip or pins that sills are hung with. To responsible firms they will be sent on 30 days' time, with freight prepaid. Write us for descriptive circular and price list.

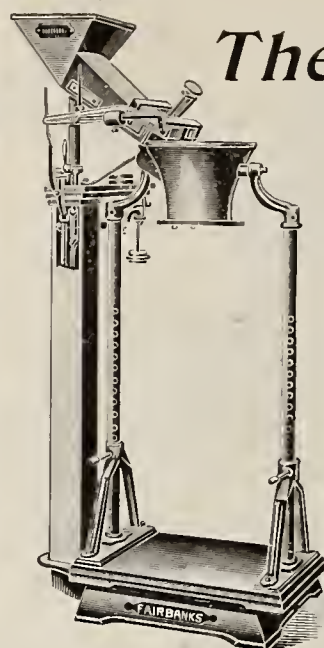
SIMS BROS., Paris, Ill.

Bondville, Ill., July 3, 1900

GENTLEMEN:—I have had one of your wagon dumps in my elevator for about 30 days; I have four dumps in elevator. Put your patent on the hardest working dump that we had, and must say that it works to perfection. It is easy on the wagon as it goes down and is easy to pull out. Before putting in patent dump the farmers would always say don't put me on that hard dump. Now they say let me dump on the patent dump. It is a great favorite with the man that does the dumping. Would highly recommend it to all elevator men. It gives wagons more pitch so that grain runs out easier, and is a first-class dump in all respects.

Yours truly, H. A. CLEVINGER.

SIMS BROS., MANUFACTURERS AND PATENTEES, **PARIS, ILL.**



The Bosworth... Automatic Weighing Scale

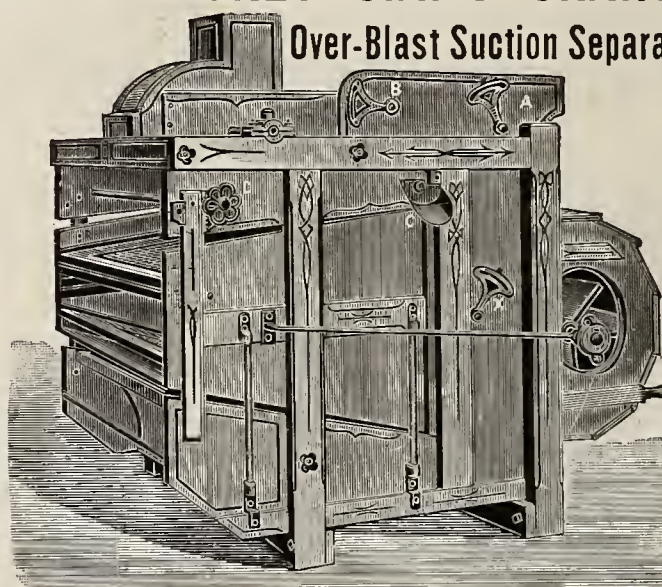
FOR WEIGHING AND BAGGING
ALL KINDS OF GRAIN.

Rapid work. Saves time.
Accurate weight. Best investment that can be made.

Write for Circular and Prices.

Munson Bros. Co.,
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THE CELEBRATED A. P. DICKEY GIANT GRAIN CLEANERS.



Over-Blast Suction Separator.

THE
STANDARD
IN THEIR
LINE.

"Grain
Cleaned
to a
Standstill."

Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over Blast.

Address..... **DICKEY MFG. CO., RACINE, WIS.**

BRAIN TOOLS

Save time and hard work and insure accurate results.

THE GRAINMAN'S ACTUARY

Shows at a glance the cost of bushels and fractional parts of bushels for any amount up to 50,000 bushels. Contains 214 well printed and well bound pages. Sent postpaid on receipt of price, \$1.00.

No miller or grain dealer can afford to be without it. Address

MITCHELL BROS. CO., 315 Dearborn Street, Chicago.

The...Hess Pneumatic Grain Drier

IS THE
ONLY DRIER

1. In which the grain is all in sight and "get-at-able" while drying and cooling.
2. In which drying and cooling are simultaneous and continuous.
3. In which the grain may be mixed and stirred while drying without using power, by simply throwing a lever.
4. Which can be emptied and filled in sixty seconds by the watch and without stopping the blower.
5. In which the heat given off by the cooling grain is saved and utilized.
6. In which all parts are removable and interchangeable, a small wrench only being necessary.
7. Which has been officially approved by the Chicago Underwriters' Association and by the Underwriters' Bureau of Fire Protection Engineering.
8. Which is used by the largest grain interests in the world.

P. S.—No wire netting nor perforated metal used in the HESS.

Hess Warming and Ventilating Co., 708 Tacoma Building, Chicago.

Conveying, Elevating and Power-Transmitting Machinery

H. W. CALDWELL & SON CO.

GENERAL MACHINISTS,

Western Avenue, 17th to 18th Streets, Chicago, Ill.

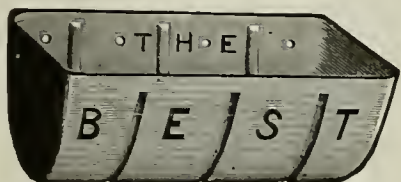
—CALDWELL HELICOID CONVEYOR—

Specialties for

Grain Elevators and Mills.



THE ONLY PERFECT SPIRAL CONVEYOR; with Flight of One Continuous Strip of Metal.



CALDWELL CORRUGATED SEAMLESS STEEL ELEVATOR BUCKETS.

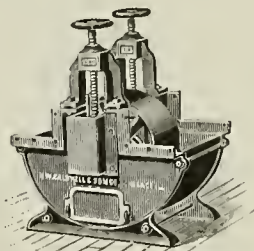
LINK BELTING.
SPROCKET WHEELS.
COTTON BELTING.
RUBBER BELTING.
LEATHER BELTING.
BELT CLAMPS.
POWER GRAIN SHOVELS.
ELEVATOR BOLTS.
ELEVATOR BUCKETS.
CONCRETE MIXERS.

FRICTION CLUTCHES.
JAW CLUTCHES.
COUPLINGS.
FLEXIBLE SPOUTS.
GEARING (all kinds).
GRAIN SCOOPS.
ELEVATOR BOOTS.
COGSWELL MILLS.
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PILLOW BLOCKS.
IRON PULLEYS.
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SHAFTING.
SET COLLARS.
SWIVEL SPOUTS.
TAKE-UP BOXES.
TURN HEAD SPOUTS.
WIRE CLOTH.

Elevator

Boot.



EASY TO HANDLE

*Willford's Light-running
Three-roller Mills*

Are not only easy to handle, but grind the most feed for power consumed of any feed grinder made. Send for circulars and prices.

Willford Manufacturing Co., 303 So. Third St., MINNEAPOLIS, MINN.

—LOAD YOUR CARS WITH—

THE IDEAL AUTOMATIC CAR LOADER.

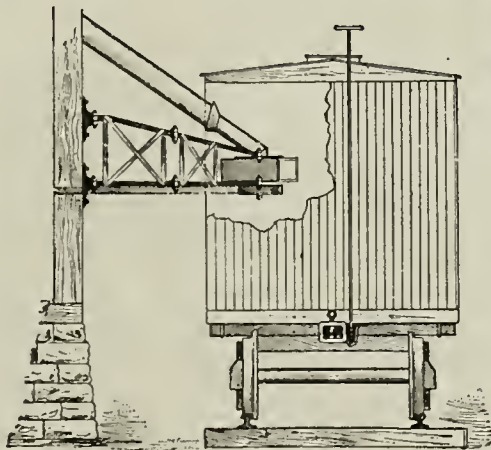
The best and most practical machine in the market for loading all small grain. We guarantee it to do its work satisfactorily.

WHAT IT WILL DO:

Loads both ends of car at same time.
Loads a car in twenty minutes.
Saves you its cost in 60 days. Seours and brightens the grain.
Cools grain that is beginning to heat.
Loads more grain in car than can be done by a man with a scoop.
Owing to its peculiar and novel construction it will not crack the grain.
It is impossible to have a choke-up.
Made of iron and steel, it is durable and easy to handle.

MADE IN TWO SIZES.

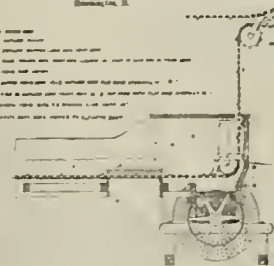
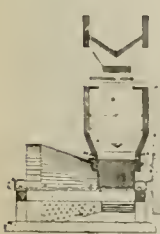
SPECIAL SIZES MADE TO ORDER.

WRITE FOR FULL PARTICULARS, PRICES AND TERMS TO **G. W. DOOLEY & CO., BLOOMINGTON, ILL.**

THE B. S. CONSTANT SHELLER FEEDER,

STYLE C-1, USING B2 TIGHTENER. A MONEY SAVER IN EVERY ELEVATOR.

B. S. CONSTANT CO.



Latest Improved Grain Separators.
Water-tight Boots, Steel Tanks,
Dust Collectors, Wagon Dumps,
Elevator Boot and Sheller Feeders.

..WRITE..

B. S. CONSTANT CO.,
BLOOMINGTON, ILL.,

Designers of Grain Elevators and Manufacturers of Grain Cleaning and Elevator Machinery.

THE INCLINE ELEVATOR and DUMP

SOLVES THE PROBLEM OF CRIBBING EAR CORN WITHOUT SHOVELING.



It attracts the most profitable part of the grain business. The Ventilated and Combination Grain Bin is excellent ear corn storage, is rat proof and a tight bin for anything. It requires only 1/2 foot of lumber per bushel of storage. The reduction in cost of storage compared with even a common, temporary ear corn crib will pay for the Incline Elevator and Dump to fill it.

Dealers having belt elevators would profit by adding our ear corn, oats, wheat, etc., storing facilities. Extensive farmers and feeders would also find improvement and profit by adopting it. Each team elevates the load it brings. Power is always ready and costs you nothing. Will elevate 20 or more of the largest loads per hour.

Our Plan for Dealers' Complete Elevator Plants. Less than one-half the investment and one-third the expense of operating an ordinary elevator. Unexcelled for speed, convenience and economy of handling shelled grain and also ear corn for shelling or cribbing purposes. It successfully competes with belt elevators. Plenty of capacity is provided in the hopper bottom shipping bins (which are of the right height to spout direct into cars) for grain purchased for shipment, while ear corn, oats, wheat, etc., are stored in the combination bin below. \$3,500 will complete a 100,000-bushel plant having twenty 1,000-bushel shipping bins, chute direct from top of building and a number of combination bins with total capacity of 800,00 bushels of small grain or 40,000 bushels of ear corn. Gravity or power cleaners, conveyors, sheller, engine, etc., may be added.

The Incline Elevator and Dump and plan of building have been greatly improved and are covered by U. S. patents. Write for prices and catalog. Come and see.

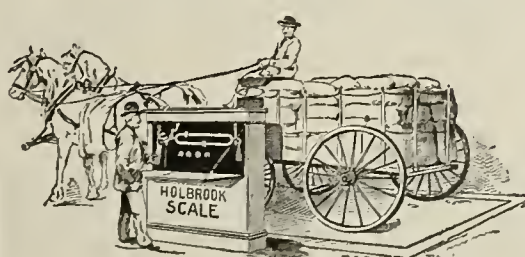
H. KURTZ & SON, SAC CITY, IOWA.

Grain Elevator Machinery and Supplies.

Wagon, Hopper, Portable and Dump Scales.

Gas and Gasoline Engines of all sizes. Carry full stocks and can furnish you complete elevator equipment on short notice.

C. D. Holbrook & Co.,
305-307 Third St. S. Minneapolis, Minn.





Plug It Up

WHEN we all get to Utopia, one of the first things we'll see is, the merchants selling goods at a big profit and having no expenses—at least so the poet says. Expense—the bugaboo of business. Cut down expense—it eats up profits, it knocks at the door of sleep—it walks arm in arm with bankruptcy. Repair is generally one of the biggest knotholes in your money-drawer. This wants a new screen—that a new pulley-wheel—and the other a new crank, and so on—until you begin to wonder if there can be a bit of the original machine left. How soon did you commence to drop profits into that knothole? Good machinery don't need repairing until late in life. The other sort soon commence to groan and moan over worn-out parts. Some Monitor types have been in constant use for ten, twelve and longer years, and they have not commenced to even "grunt."

Wouldn't it be well to plug that knothole—repairs—into which you have been dropping per cent profits, with Monitor machinery? Let us talk to you about it—to-day is better than too late.

SOME MONITOR MACHINES.

Monitor Adjustable Scourer.
 Monitor Double Scourer.
 Cranson Improved Scourer.
 Cranson Double Scourer.
 Monitor Receiving Separator.
 Monitor Milling Separator.
 Monitor Flour Packer.
 Monitor Warehouse Separator.
 Monitor Oat Clipper.
 Monitor Warehouse Smutter.
 Monitor Corn Cleaner.
 Monitor Corn Scourer.
 Diamond Corn Sheller.
 Diamond Dustless Corn Sheller.
 Silver Creek Hominy Aspirator.
 Monitor Dustless Aspirator.
 Monitor Flax Cleaner.
 Monitor Barley Separator.
 Monitor Barley Scourer.
 Cranson Buckwheat Scourer.
 Cranson Roller Buckwheat Shucker.
 Monitor Scalping and Receiving Shoe.

THE HUNTLEY MANUFACTURING CO.,

SILVER CREEK, N. Y.



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XIX.

CHICAGO, ILLINOIS, NOVEMBER 15, 1900.

No. 5.

{ ONE DOLLAR PER ANNUM.
SINGLE COPY, TEN CENTS.

McLAUGHLIN'S ELEVATOR AT NEVADA, OHIO.

They do things in the grain trade somewhat differently in Ohio than the elevator men do "out West," owing to the different characteristics of the markets to which grain is shipped, which are sometimes the terminal houses and sometimes the interior towns of Pennsylvania, etc. But in Ohio, as in Illinois, or the West generally, the foundation of success in the grain trade in these days of narrow margins is found, in the first instance, to be a well arranged elevator, enabling the dealer to handle and put his stuff into condition for shipping with the smallest possible expense. For in the grain trade, as in many lines of manufacturing, the unnecessary part of the cost of handling or conditioning large lots of material very often consumes all the income which might, with better appliances or a more advantageous site, be all profit or a source of strength in case of close competition.

The elevator shown in the accompanying illustration, belonging to and operated by

Ed. McLaughlin at Nevada, Ohio, is one of the best country elevators in Ohio and certainly one of the best on the Pennsylvania Railroad in that state. Mr. McLaughlin deals in grain, seeds, wool, salt, oil meal and cement, and his buildings have been arranged to meet the various requirements of his business. The main building is 40x60 feet in size, and has a wool and seed room 20 feet square on the east. The elevator has two stories and a cupola 9 feet high. On the south side is a 3,000-bushel corn crib. The driveway is between this crib and the main building. There is at present no dump, but one is to be put in shortly. The drive-

way is now utilized for salt storage, of which it will cover between 200 and 300 barrels.

Under the entire building is a good basement, at the east end of which, under the wool and seed rooms, out of the way of everything, so to say, and yet in quite a handy situation, is the engine room. Here are two gasoline engines, one of four-horsepower, which is used on light work, such as operating the seed and grain mills and elevating; the other,

15,000 bushels of grain, and nearly an equal amount can be stored on the first floor.

The machinery consists of one Clipper Seed Mill and a large size Clipper Grain Cleaner. The latter has been set up overhead, so as to be out of the way of operations on the working floor. It is located directly under one of the large grain bins, so that it is fed directly from the bin, the grain after passing through the machine falling into a hopper under it, where the weight is taken.

The office is located in the northwest corner of the elevator, which stands about one block from the Pennsylvania depot. Mr. McLaughlin is still quite a young man, but he is doing a nice business on business principles, making friends with the trade, and also some money in a modest way.

CLOVER SEED.

Clover seed receipts for October at Toledo realized the predictions of shortage by showing only about 19,000 bags, against 40,000 bags last year, 15,500 in 1898 and 56,000 in 1897, and November is expected to total still less. There is no mistaking the fact that the crop is

short both at home and abroad, while stocks of old seed are small.

Toledo is the leading clover seed market. Prime, which has been scarce for three years, is the speculative grade there, and October the favorite month, but December is now in. King & Co. say: "The customary margin is a dollar per bag to be kept good. All trades are made upon the basis of two and a half bushels to the bag. The price is per bushel here, but per cental in Chicago. Trades in futures are made in fifty-bag lots or multiples thereof. Most orders are in car lots of two hundred bags each. Some come in five hundred or



ED. McLAUGHLIN'S GRAIN ELEVATOR AND WAREHOUSE AT NEVADA, OHIO.

of fifteen-horsepower, is used for operating the chop mill and for shelling corn. It can, however, be connected to operate also the seed and grain mills, etc., so that the one machine will furnish all the power needed for the full operation of the plant. This arrangement of engines is economical practice, but is not one so generally resorted to by elevator men as it might be with profit to themselves.

The building is sheathed with iron and has a slate roof, while the frame and construction generally was planned to give it strength to carry safely any load that could be put into it. There are eight bins in the second story, which will hold about

thousand bag lots." At \$6.75 to \$6.90, it takes "mon" to swing very much of the stuff except on margin.

J. HUME SMITH.

To the casual observer the fact that a man occupies a position in life a little better than his fellows, is sufficient evidence that he deserves the place. It is not a question of how he got there, when he got there, but the idea that fixes itself most strongly in the mind is, "he's there." It is for this reason, no doubt, that chicanery and even fraud, when used for the purposes of self-advancement,



J. HUME SMITH.

are often lost sight of by the observer, by being overshadowed by the bigness of the man who has used such measures to attain his place.

The true test of the right of one man to the approval of his fellows is stability, for the fundamental laws of human existence are opposed to a permanent resting place for conduct on other principles than justice and right, and when through a course of years a man enjoys the confidence of his associates, it may be unerringly said that he is truly deserving, for time is a great revealer of secrets.

J. Hume Smith, subject of this sketch, has a reputation for probity and fair dealing based upon years of conspicuous association with the grain trade. He is at the present time president of the Baltimore Chamber of Commerce, and is serving his third term, an honor which has not been conferred on another member since 1870.

Mr. Smith was born April 3, 1847, on a farm in Southern Pennsylvania, and was educated in the public and private schools of the neighborhood. He entered La Fayette College in Easton, Pa., in 1865, graduating in 1869. After a year spent in teaching school he went to Chicago, where, in the fall of 1871, he commenced business in a book publishing house. The fire of that year destroyed his employer's business and this casualty changed the course of his future life. Returning East he continued in the same business for a time, and in January, 1873, married Miss Anna Milligan in Philadelphia, where he engaged in the clothing business until he removed to Baltimore and entered the grain business.

Mr. Smith was interested with different firms until 1896, when he organized the present firm of Smith-Gaubrill & Co., which does a large receiving and exporting business. He is president of the company.

Mr. Smith is a Republican in politics and a member of the Presbyterian Church. His family consists of his wife, son and eight daughters. When business hours are over he puts into practice his firm belief in the value of relaxation and the virtues to be derived from social pleasures, and is a member of the leading social and commercial clubs of Baltimore.

Charters for 2,024,000 bushels of grain to Europe were made at Baltimore during the week of October 20, being the busiest week of 1900.

STEGE BROS' ELEVATOR AT MATTISON.

The elevator erected for Stege Bros. at Mattison, Cook County, Illinois, by the C. M. Seeker Engineering Company of Chicago, is now finished and ready to begin operations. The house, which has 50,000 bushels' storage capacity and working capacity of 30,000 bushels, is most admirably located. Mattison has, in addition to the Illinois Central and Michigan Central roads, the E., J. & E., or Outer Belt Line, giving it perfect railroad facilities; and is, as well, located in the midst of quite a fertile farming country, with the roads of the neighborhood in first-class condition. The house stands on sidetracks of the E., J. & E. line, and has also a driveway and dump for handling grain from farmers' wagons.

The building is a substantial frame structure, with stone basement and stone piers; the walls are ironclad, and there is a metal roof. The size is 36x48 feet; height to roof of bin floor, 48 feet, and to top of cupola, 92 feet. The first floor has an area of 1,728 square feet. The bins, twelve in number, are twelve feet square each, cribbed construction, using 2x4's and 2x6's, supported on heavy timbers, which carry the bottoms above a high ground floor. The stair and belt tower is located on the north side and between the bins, and is inclosed on the first floor with 2-inch planks. The windows are screened with the regulation 1/2-inch mesh.

The machinery equipment, which was all furnished by Skillin & Richards Manufacturing Company of Chicago, is complete and modern in all details. On the first floor is located the cleaning machinery, consisting of one Invincible Grain Cleaner and one Invincible Oat Clipper. There are also one car-loading spout, power car unloading shovel and car puller, wagon drive and dump, and two elevator legs, with iron boots. Above the bin floor are the scales and garner floors. The dust

and 50 feet in the boiler room; a good supply of water barrels, fire pails, axes and metal waste cans are distributed throughout the building.

The office building is a one-story frame building, with shingle roof, detached, with scalehouse addition. The office furniture and fixtures are first class, and thus in all appointments completes this model plant.

MINNEAPOLIS CHAMBER OF COMMERCE.

The annual meeting of the Minneapolis Chamber of Commerce Association was held on October 18. Retiring President C. M. Harrington, in his annual address, referred to the successful year just closed, to the settlement of the building question which will give the chamber new quarters in which to handle the crop of 1901, etc. As to the future he said:

"The future growth of this market and the financial prosperity of its members depend entirely upon the observance of the excellent rules now in force. They not only protect the customer, but also give to the members fair remuneration for their services, and every one of us should be glad to abide by them in letter and spirit.

"The greatest evil we have to contend with today, and in the future, is the bucket-shop, an institution that has cast discredit on legitimate exchanges and has been the means of serious loss to the public. There are thousands of them in this country, and if the trades they pretend to make were put on the open market, they would vastly increase the volume of business and tend to advance prices. The Chicago Board are doing much to close up the places of this character and many have gone out of business. The Board of Trade is receiving the support of the federal courts and all outside exchanges ought to cooperate with them in their efforts. One of the best aids to accomplish this is the new Exchange Telegraph Company, which will



STEGE BROS' ELEVATOR AT MATTISON, ILL.

collecting apparatus is the Le Clair system, put in by Adrien Le Clair of Chicago. There are two dust collectors on the roof of the boiler house, and all dust and refuse of the elevator is blown directly to the boiler fires and burned. All shafting used is adjustable.

The boiler house is a frame construction, ironclad, with metal roof and detached, standing five feet east of the main building. Its size is 25x40 feet, and it contains a 60-inch by 16-foot tubular boiler, of 100 horsepower, in brick setting, and metal stack. The engine is of 75 horsepower. There is a Stillwell-Bierce Duplex Steam Force Pump, size 6x4x6 inches; suction, 3-inch and 2-inch discharge, supplied from an inexhaustible well, 4 feet in diameter and 45 feet deep. The pump is connected to a 2-inch standpipe in the elevator, with 50 feet of 2-inch hose attached on each floor,

be controlled by members of exchanges, and they can thus say who shall have the legitimate quotations and who shall not. This Chamber of Commerce will, before many years, have the same fight on its hands in order to protect its business, as the bucket-shops will substitute our quotations for those of Chicago and then the orders will stop there instead of coming on the market, as at present."

The report of the board of directors showed the receipts as follows: Wheat, 87,782,610 bushels; oats, 8,615,380; barley, 2,973,900; corn, 4,930,550; rye, 549,390; flax, 4,110,700; total, 108,972,530. The total difference in favor of 1899 was about 10,000,000 bushels, distributed as follows: Wheat, 4,800,000; corn, 3,000,000; oats, 4,000,000; rye, 450,000. In barley there was a gain of 1,200,000, and flax a gain of 1,000,000. Flour production for the year end-

ing October 1 was about the same as that of the previous year and was as follows: Production, 15,308,160 barrels; exports, 4,897,600; shipments, 15,078,432. The figures for the previous year were: Production, 15,318,415 barrels; exports, 4,593,140; shipments, 14,401,910.

The committee also reported a larger elevator and flax crushing capacity in the city; that there are now 539 members out of a possible 550, the eleven unused memberships being held at \$1,000 each; that there has been of late a large increase of trading in futures; and that the committee has failed to get the necessary evidence to enable the freight bureau to prove discrimination in freight rates in favor of Chicago before the Interstate Commerce Commission, to which is attributed the fact that wheat from points to the southwest of Minneapolis went direct to Chicago instead of coming to Minneapolis as heretofore.

Mr. John Washburn, the president elect for the ensuing year, was then installed in office, making a brief address.

NEW ELEVATORS IN COOK COUNTY.

Several new elevators are in course of construction or nearing completion in Chicago and vicinity. The Chicago, Rock Island & Pacific is now engaged in dredging a slip at One Hundred and Eighth Street and Calumet River, preparatory to erecting an elevator of large capacity. The B. & O. Railroad is now constructing a plant at Eighty-seventh Street, South Chicago. This house will be a transfer elevator and the only one owned by this company at the present time in Chicago. The Calumet Grain & Elevator Company is completing its new house "C" at Ninety-sixth Street and Calumet River, which will be put into active operation during the present month. The Stege Bros.' transfer elevator, situated at Mattison, Cook County, is now completed and but a few minor details are to be attended before it will be ready for business. The Middle Division Elevator at Harvey, Ill., is undergoing such a remodeling in all particulars that it will be practically a new house when completed, which will be during the present month.

BROOKLYN ELEVATORS AT WORK.

After a long period of expensive inactivity, the elevators on Erie Basin, Brooklyn, have begun taking in grain in comparatively large quantities. This activity began shortly after the organization of the Buffalo-New York trunk line agreement as to uniform rates, and may be post hoc or propter hoc that affair, according to the point of view.

As early as October 10 Beard's elevators on the Basin, Masters' elevator on Commercial Wharf and Pinto's on the North Pier were taking in grain from canal boats, while the steamship Michigan on October 9 unloaded grain at Dow's elevators through a floating elevator, not one of the elevators of the Brooklyn Wharf & Warehouse Company being equipped with a marine leg to handle this kind of business. At that time, there were about 200 canal boats in Erie Basin holding about 1,600,000 bushels of grain in storage.

The situation continued to improve all through the month of October, and on the 22d the McCormick, Commercial Wharf and Atlantic Basin houses were opened to take in grain from canal boats. Orders were also given to put the central elevator at Roberts' Stores into working condition. This house had done practically nothing since the warehouses syndicate was formed, six years ago.

The elevator wharves, therefore, are exhibiting unwonted activity. The elevator company's income is increasing from nothing to a neat sum, while a large number of men are working as trimmers along the water front, so that the general appearance is more lively than it has been for a long time. The Atlantic Basin is more thronged with steamers, lighters, hoisters, coal and grain boats than it has been since the outbreak of the war in South Africa.

THE MONARCH ATTRITION FEED MILL.

For grinding corn and cob, corn and oats, oat hulls and all kinds of cereal feedstuffs the Monarch Attrition Mill, illustrated herewith, has been brought to a high state of perfection. At this season, when many are contemplating installations or improvements in their feed departments, a brief review of the mechanical features of this machine will hardly fail to prove interesting, especially to those who wish to be free from the annoyance of stone dressing, or who wish the largest possible capacity for the power they have available.

The grinding is done by two plates or discs, made of hard, tough metal, and bolted to the running heads, which are driven in opposite directions. This action rapidly reduces the material to a uniform and surprising degree of fineness.

A valuable feature, peculiar to this machine, is the construction of the base, which permits the heads to be moved apart for inspection or renewal of the grinding plates. The base of one of the grinding sections has V-shaped tracks planed and fitted to guides on the lower base in a manner similar to that of an iron lathe. On this upper base are cast two cog sections which mesh with pinions on a cross shaft attached to the lower base. By

This feeder is especially adapted to handling oil and linseed cake and like material.

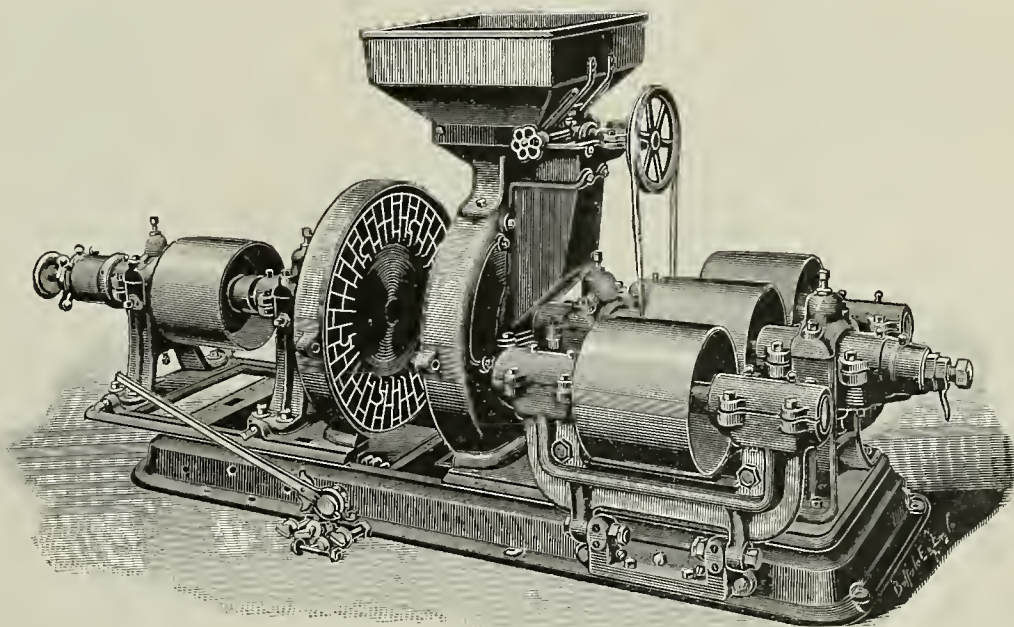
The cut shows a mill equipped on one end with a three-pulley drive, which does away with the use of twist belts. This makes the mill less expensive to install, more convenient to operate and insures longer life for the belts. When necessary to reverse the motion to bring into use the opposite edges on the grinding plates, it is claimed that these idlers can be easily transferred to the other end of the bed plate.

This mill is made by Sprout, Waldron & Co., Muncy, Pa., who have had a long and extensive experience in this line of manufacture. They make a complete line of burr and attrition mills and will gladly supply inquirers with any further information desired.

UNOCCUPIED GRAIN ELEVATORS IN AND NEAR CHICAGO.

At the present time there are but few elevators in Chicago and Cook County that are idle and unoccupied. As a rule, they are all of a small storage capacity. The following list will about include them all:

Leet & Fritze's elevator, situated on the Chicago & Eastern Indiana Railroad at Ninetieth Street and



SPROUT, WALDRON & CO.'S MONARCH ATTRITION FEED MILL.

removing two machine bolts and turning three T bolts the grinding section mounted on the movable base can be quickly run back and forth by means of the hand lever shown in the cut at the side of the mill.

Patented ball bearings are used on the driving shafts, which take up the end thrust, reduce friction and save power.

Another valuable feature is the self-oiling boxes, which are capable of adjustment in every direction, and in addition the pedestals supporting each box can be readily moved on the base. This allows the wear to be taken up perfectly on all sides.

Each bearing is supplied with a reservoir holding a pint or more of oil, which is supplied to the journal in a constant stream by means of small roller chains. This insures cool running journals with a minimum of wear and attention, no matter how fast they may be run. It also means cleanliness as well as economy of lubricating oil, as the oil is used over and over instead of running out at the ends of the boxes. The oil can be drawn off from these reservoirs when desired, the bearings thoroughly cleansed and new or filtered oil again supplied.

The Monarch Mill is supplied with a noiseless shaker feed that runs perfectly cool and requires no attention beyond regulating the amount of feed desired. The makers also supply, when desired, their combination crusher and feeder, which is of novel design. It is composed of two fluted crushing rolls driven in opposite directions by small spur gears. It also has an adjustable slide for regulating the amount of material, and by means of a clutch it can be instantly started or stopped.

Stewart Avenue, Oakdale, has a capacity of 350,000 bushels in seventy-four bins. This house was last occupied by the American Cereal Company, and has laid dormant for a long period. The property is in possession of the Continental National Bank.

The Chicago Elevator Company's elevator at Cragin, Cook County, is another house that has not done any work for a long time. This plant has a capacity of 50,000 bushels and is situated on the Chicago, Milwaukee & St. Paul Railroad.

The Hayford Elevator (formerly known as the Farmer Harris Elevator) is located at Seventy-fifth Street and South Kedzie Avenue, Hayford, Cook County. This property has not been utilized for a considerable length of time. It has a capacity of 100,000 bushels in twelve bins of stud construction. There are also a brick engine and boiler room and electric light plant. It is owned by George T. Sidwell.

The Morgan Elevator is another idle property. It contains cleaning machinery and seven bins and has a storage capacity of 20,000 bushels. A long period has elapsed since this plant was last working. It is owned by R. J. Richardson & Co., and situated at Walleck Place and the C., B. & Q. R. R.

The Seed Corn Breeders' Association was recently organized at Springfield, Ill., with F. A. Warner of Sibley as secretary. The purpose of the organization is to regulate the production and sale of seed corn by sending out seed corn testing not less than 95 per cent vitality; sending out seed corn in the ear unless otherwise ordered, and seeing to it that the breeder produces his own corn and does not sell inferior grades.

CORN PRODUCTS AT PEORIA.

The Corn Palace at Peoria contained the official corn show of the Illinois Corn Growers' Association for 1900. This consisted of exhibits of corn of all kinds grown in Illinois, of the machinery used in the growing and harvesting of corn, of illustrations of the methods of growing corn, and of exhibits of corn products by their manufacturers. The building was erected in a central location in the city of Peoria, and both it and its contents were visited by many thousands of citizens of the city, as well as by corn farmers from all parts of the state, during the late Corn Carnival, which extended over the greater part of two weeks of October last.

No single exhibit within the Palace attracted more attention from corn growers and grain dealers than that of the Glucose Sugar Refining Company, whose factories are located at Chicago, Peoria and Rockford, Ill., and Davenport and Marshalltown, Ia. The glucose industries of the country have consumed the enormous amount of 41,376,000 bushels of corn in a single year, and this company for the year ended July 31, 1899, ground 27,000,000 bushels.

A picture of this company's exhibit, which was in charge of F. W. Hagen, as representative of the

and mechanical, which are benefited by its existence.

CHICAGO INSPECTION OUT.

On October 17 A. O. Slaughter & Co. made a complaint to the Board of Trade against the state inspection of a cargo of No. 1 Northern wheat delivered to them at Chicago to be shipped to Buffalo. Slaughter & Co.'s private inspectors are said to have accepted the grain as standard, but later a broker representing Slaughter & Co. handed a sample of the wheat to Wm. Smilie, assistant chief state inspector, who pronounced it No. 2 mixed.

The subject was referred to the warehouse committee of the Board of Trade, of which Wm. N. Eckhardt is chairman, and which examined Harry B. Slaughter, F. E. Hotchkiss, Samuel Scotten, Rudolph Desjardines, and Grain Inspectors Peter Reed, Bert Waare, Con McMahon, and George Tanner. Samples of another lot of wheat besides that referred to in the Slaughter complaint were submitted. The purchaser of the wheat was given certificates calling for "new No. 1 Northern" wheat, but various expert handlers on seeing the sample declared it a mixture of hard winter and No. 3 spring, which would not grade better than No. 3 spring, and the

could not be made without further amending the warehouse act. An early decision on the question of the constitutionality of the amendment to the warehouse act passed by the legislature of 1897 will undoubtedly enable us to suggest such amendments to our rules as would effectually cure the present evil. This decision has long been expected from Judge Tuley."

FIRE PUMPS IN ELEVATORS.

The grain elevators of Chicago and Cook County, as a rule, are well equipped with fire fighting apparatus, such as standpipe and hose. The houses having the largest pumps installed are as follows:

The South Chicago elevators "C" and "C Annex," which have one Worthington pump, with capacity of 1,750 gallons per minute; suction, 14-inch; discharge, 12-inch; and one Fairbanks-Morse pump; capacity, 1,000 gallons; suction, 12-inch; discharge, 8-inch.

Armour's elevators "A" and "B" have a Wheeler & Tappan pump, with a capacity of 1,500 gallons per minute; suction, 12-inch; discharge, 10-inch; while Armour's "B Annex" has a duplicate of the last-named outfit. Armour's elevator "D" has two duplex Blake pumps, with a capacity of 1,000 gallons each, 12-inch suction and 8-inch discharge.



THE CORN PALACE AT PEORIA, ILL.



EXHIBIT OF THE GLUCOSE SUGAR REFINING CO., AT THE PEORIA CORN PALACE.

company, is given herewith. The products shown on the table were about twenty-five in number, divided into classes, such as glucose, sugars, starches, dextrans, feeds, corn oil, corn oil cake and rubber substitute. The forms of glucose are used for making jellies and in brewing; the sugars go to the brewers and wine and vinegar makers, both of America and Europe; the starches are worked into candies and are consumed in the form of pearl starch by textile manufacturers, as refined grits by the brewers, as corn flour and flourine for mixing with wheat flour, and in the laundry; the dextrans are used by the textile manufacturers and the manufacturers of confectionery, paper boxes and oilcloth, as well as for gumming envelopes, stamps, etc. The feeds, or corn oil, oil cake, etc., are by-products, so to say. It was a surprise to many, no doubt, to know that of corn syrup no less than 125,000 gallons are consumed annually on the table and in the kitchen. It is made of 90 per cent pure corn syrup and 10 per cent cane syrup; and is now sold as "Kairomel Brand" Corn Syrup.

The nub of the matter is that the Glucose Sugar Refining Company is the largest purchaser of cash grain in the world. Its monthly expenditures for grain have often exceeded half a million of dollars, and its Illinois factories alone consume corn in amount equal to half the year's surplus for this state. It requires literally an "army" of farmers and others to grow the corn it consumes and many more men to make, box and handle its own products, to say nothing of the industries, chemical

wheat was resold in the pit instead of being taken out of store for shipment.

On October 31 the committee submitted a report, the salient features of which are as follows:

"It is the opinion of your committee that it is not within its province or within the jurisdiction of the Board to determine as to the quality of the sample of wheat submitted, as that is wholly by the laws of the state under the jurisdiction and within the province of the state grain inspection department and under the control of the railroad and warehouse commissioners. Your committee has, however, called the attention of the railroad and warehouse commissioners to the complaint of A. O. Slaughter & Co. as to the quality of the wheat submitted.

"Relating to the suggestion in the communication from A. O. Slaughter, the railroad and warehouse commissioners would undoubtedly grant permission to examine the stocks of wheat in the public houses by a properly authorized committee, to be appointed by the president, should it be deemed advisable by your honorable body to institute at any time such an examination.

"As to the further suggestion of the appointment of a grade inspector by the Board of Trade for the inspection of wheat into regular elevators which on his approval would be deliverable on contracts for future delivery, your committee believes that such an appointment would be impracticable and would tend to create constant friction between such appointed inspector and the state officials; and, further, we believe that such appointment

Armour's "E" has a Warren pump, with a capacity of 1,000 gallons per minute, 8-inch suction and 6-inch discharge. Armour's "F" has a Knowles pump, with capacity of 1,000 gallons, 8-inch suction and 4-inch discharge.

The Nebraska City Packing Company's elevators are equipped with a Blake pump of 1,000 gallons' capacity, with 12-inch suction and 8-inch discharge.

The Calumet Elevator Company elevators "B" and "C" have each a 1,000-gallon pump, with 10-inch suction and 6-inch discharges.

Peavey's elevators "A" and "B" are protected with a Smith & Vaile pump, with a capacity of 1,000 gallons per minute, 12-inch suction and a 10-inch discharge; also with a Fairbanks-Morse pump of 600 gallons' capacity, 8-inch suction and 6-inch discharge.

The Belt Line Elevator has a Deane pump of 1,000 gallons' capacity, with 10-inch suction and 4-inch discharge.

The plants not enumerated have pumps for fire service ranging from a capacity of 800 gallons to as low as 100 per minute. There are at the present time several of the larger sized houses that are devoid of any equipment in this particular, but the probabilities are that in the near future some of the latter will add this necessary equipment to their fire-fighting facilities, as negotiations are now pending for them.

One of the biggest thefts recorded at Cleburne, Texas, was \$1,700 worth of wheat and oats stolen recently from a grain house in that town.

THE "B & C" FRICTION CLUTCH PULLEY FOR GAS AND GASOLINE ENGINES.

It is noticeable that gasoline engines are being more generally employed for operating grain elevators than any other power. The economy and ease in operating and caring for engines of this class make them especially desirable for the purposes of the elevator man. The only drawback heretofore experienced in their use is the difficulty sometimes met with in starting them, when they have a heavy load to pull. This may be overcome by the application of an efficient friction clutch pulley, which will enable the operator to throw off the load until the engine is started.

In this connection the engravings which we show

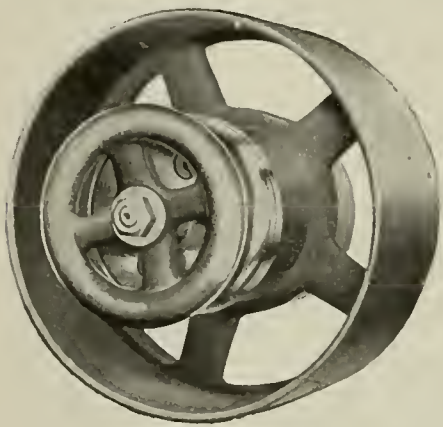


FIG. 1. "B & C" CLUTCH PULLEY FOR GAS AND GASOLINE ENGINES.

herewith of the "B & C" Friction Clutch Pulley are of unusual interest. The "B & C" clutch is of improved form, and specially designed for gas, gasoline and oil engines. It bolts directly on the flywheel of the engine, where it is within easy reach for operation, inspection and adjustment. Its application to an engine is a very simple matter and no departure from flywheel design is required.

The pulley carrier, which forms the journal for the pulley and the case containing all of the working parts, fits over the hub without touching it, and is attached by bolts or cap screws to the bosses, which are cast on the arms and turned true with the bore, and in no way interfere with the use of regular fixed pulley, if desired. The action of the

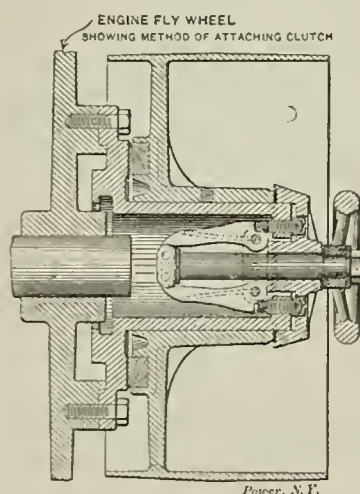


FIG. 2. SECTIONAL VIEW OF "B & C" CLUTCH PULLEY.

clutching mechanism will be readily understood from Fig. 2. The principle is that of side gripping, which eliminates the effect of centrifugal force and insures a positive release. In effect, the faces of the pulley hub, while in clutch, are held in a circular vise. To develop the gripping power it is only necessary to shove in the central spindle by means of the hand wheel, which revolves freely on the spindle, allowing it to be held irrespective of rotation of the clutch. The release is accomplished by seizing the hand wheel and pulling the central spindle out until checked by contact of the leather washer against the gripping plate. Such wear as occurs on the gripping surfaces, which are arranged with wooden inserts on all but four and six horsepower sizes, is taken up by a simple screwdriver adjustment of the adjusting screws and their lock nuts acting at the same time as drivers for the gripping plate. The outer surface of the clutch is entirely free from any projections and this

admits of it being safely handled while running. The mechanism is simple in design and positive in its action, and is entirely inclosed in a dust-proof case.

The "B & C" Friction Clutch Pulley is manufactured solely by the Whitman Manufacturing Company, 39 Cortlandt Street, New York City, who will gladly send prices and any further particulars our readers may desire, upon application.

LLOYD J. SMITH EXONERATED.

The second trial of Lloyd J. Smith on a charge of shipping grain out of the Chicago Elevator Company's elevator without canceling the warehouse receipts was concluded on November 3, when a verdict of not guilty was handed in by the jury. The facts presented to the jury were substantially the same as in the former trial, a summary of which appeared in the "American Elevator and Grain Trade" for October. Mr. Smith's friends on the Monday following his acquittal got up a parade which ratified the verdict by an enthusiastic demonstration, in which some 2,000 men took part. He was given an enthusiastic reception on 'Change on Monday following the rendering of the verdict; but he failed of an election on November 6, to be drainage commissioner. A third trial is talked of by the state's attorney.

RIVER NAVIGATION IN THE WEST.

The whaleback principle in shipbuilding has reached the Mississippi River. It will attempt to revolutionize river transportation methods, and the attempt will be watched with great interest. It is about a year since the "American Elevator and Grain Trade" stated that Capt. Alex. MacDougall of Duluth had gone to St. Louis to build river boats on the whaleback principle for the transportation of grain to New Orleans. The first of these boats sailed from St. Louis with 3,500 tons (over 93,000 bushels) of corn on board for New Orleans.

The tow consisted of the steel steamer MacDougall and two steel cigar-shaped barges. The steamer is the only towboat on the river having a screw propeller. The three vessels were built at Carondelet at a cost of \$110,000. The barges are 265 feet long, with 40-ft. beam and 14 feet deep, with flat bottoms; and with a 11-ft. draft can carry 3,000 tons of grain each. The steamer is 180 feet long with 30-ft. beam. It is of a different model than the barges, being very shallow forward and deep aft, drawing less than a foot forward as it moved away on its maiden voyage, while its rudder was nine feet in the water. Its propeller is eight feet in diameter. It is equipped in a novel manner, however, with water-ballast tanks so arranged that in case shallow water is found at any point the weight can be transferred from the after part to the forward tanks, and the stern so lifted that it will draw but four feet. In this way the steamer loses 40 per cent of the power, but regains it immediately when the obstruction is passed. In the low-water periods, when this shallow draft is a necessity on the upper part of the river, the current is so much reduced that the decreased power will be easily sufficient. There has been less than four feet of water below St. Louis but once in the last twenty years. There was at November 1 about thirteen feet.

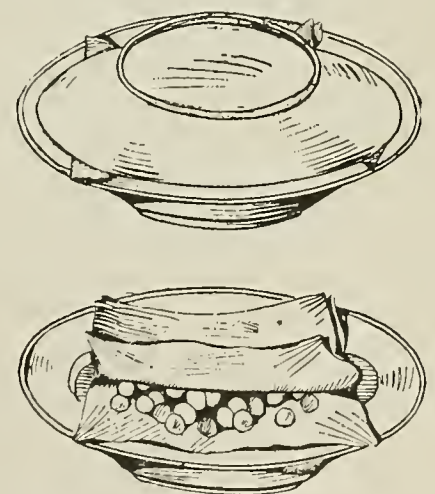
St. Louis has been handling about 50,000,000 bushels of grain annually, of which in 1899 only 2,250,000 went by river to New Orleans. This is less than for any year since 1876 (1895 excepted), the average shipment by this route having been from 1875 to 1886 inclusive, 7,508,391 bushels, and for 1887 to 1898 inclusive, 7,815,577 bushels. The recent monograph on the "Grain Trade of the United States" issued by the department of statistics, says that the river has lost freight in the past quarter century to the railroads and the rate of freight on grain between the two cities declined from 5.50 cents per bushel in 1883 to 4.50 cents in 1898, from 6.88 cents in 1891, the average rate 1891-98 having been 5.03 cents. The fact that the railroads have gotten

the business is evidence that the old barge system was able to make no better rate. But the grain has been carried in old-style wooden barges, towed by sternwheel steamers. The new barges carry on the same draft fully 35 per cent more grain than these old boats, while the screw steamer operates at a saving of 40 per cent of fuel over the paddle boats. The rail grain rate to the seaboard varies from 11 to 14 cents a bushel. The rate in the old barges is 4½ cents a bushel. The steel line expects to be able to cut under this considerably at a big profit. If the barges are successful in getting return cargoes a still better rate may be made if necessary, while if Capt. MacDougall's hopes of success with the present fleet are realized there will be no lack of capital to restore the river to its ancient prestige of a great national highway, and to this the Illinois, with its new and permanently increased depth of water, will contribute to no inconsiderable degree.

Among the humorous features of the event of the moving out of St. Louis of this maiden fleet of river whalebacks was the cry of the croaker. "The use of the screw steamer in towing on the Mississippi is as great a departure from custom as the introduction of steel barges," says the Chicago Record's correspondent. "It is a maxim among pilots here that nothing will handle a steamer successfully in a current except a big-surface wheel. One of the oldest pilots on the river, standing on the Texas of his steamer to-day watching the MacDougall at work, prophesied that when the current caught it the vessel would be carried from the Merchants' bridge down against the Eads bridge before it could be got under control. He was going on to explain to me why this would be so when the steamer moved away from the dock with its tow, straightened down the stream and started without a hitch under full control of the wheel. He was not convinced, though in the flood at present the current is fully five miles an hour. 'Wait till it gets up to a nine-miler,' was all he would say. Capt. MacDougall, however, has no such fears, and believes that the screw propeller will prove more efficient than the surface wheel, having more underwater body to give it stability."

METHOD OF DETERMINING THE VITALITY OF THE GERM.

In a recent bulletin from the Agricultural Department there is described an excellent and easy method of testing seed before planting. It consists simply of placing the seed between the folds of a



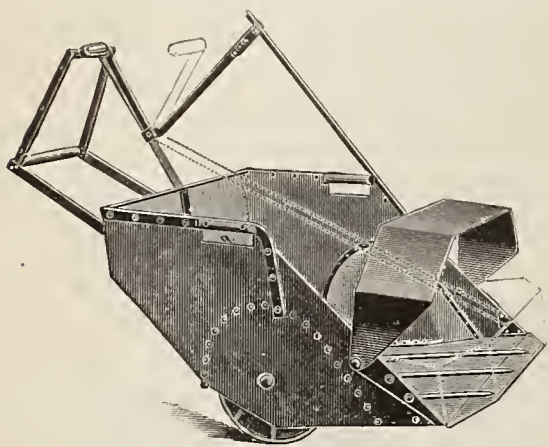
piece of flannel on a dish and on top of this another dish is placed. The seeds experimented with should be carefully covered and removed as quickly as they sprout. In the case of red clover, good seed should sprout 80 to 90 per cent in three days.

An Iowa man has invented a corn husking machine that is said to be a success, although the description of it reads very much like that of a machine brought out in Illinois more than twenty years ago, that was a failure. In operation, a pair of long rollers widely separated at the bottom and rising at an angle of forty-five degrees straddle the rows of corn. These rollers work inward, pluck the ear of corn, which is given to another pair of rollers, and is husked and run up an inclined plane and dumped into the wagon.

THE KENAGA GRAIN SHOVEL.

Among the latest machines which the Webster Mfg. Co., Chicago, has placed on the market as an aid to the economical operation of the country elevator, is the new Kenaga Grain Shovel, shown in the illustration. It is an entirely new invention and ranks between the hand and the power shovel for moving grain, coal and like materials. It can be used in a flat-bottomed bin, on the open floor of the elevator or in a boxcar, and has a capacity of four bushels.

The body is of steel, hopper-shaped, and set low upon large, honsed wheels, so that the mouth of the shovel enters the grain close to the floor. Pivoted to the side walls and extending across the mouth is a



KENAGA GRAIN SHOVEL.

gate of sheet steel, operated by a simple system of levers controlled from one of the handle bars. This gate is raised when the shovel is pushed into the grain and closed down through the grain when it is drawn out. The entire load is thus retained and is balanced by bringing the small wheels of a supplementary attached truck into play. The loaded shovel is propelled from the rear by the handles braced from the body, and is easily moved. The load is quickly dumped by raising the gate and tilting forward upon the large wheels.

RELATIONS OF SHIPPER AND BUYER.

[A paper read by E. A. Grubbs at Columbus meeting of the Ohio State Association.]

There is no reason why the relations of shipper and buyer at destination should not be as close as that of twin brothers, granting honest differences in judgment as to quality and weight at both ends of the line. In my opinion, much of the trouble between shipper and buyer originates at point of shipment. Let the shipper be careless, without pride in the quality of his grain, with no facilities for weighing or cleaning, preferring to "guess" the weight of his grain, and the conditions are ripe for trouble. Say he sells yellow corn and ships mixed, and dirty at that. Of course he's "docked," he gets mad and calls the terminal buyer a thief, and believes he has been robbed in weights and docked too much in quality.

Sometimes we hear a shipper say, "It doesn't pay to reclean grain," or, "I have to take the weights at the other end, or within 1 per cent, so I'll just add 1 per cent to start with." What would the shipper say if he knew that the buyer deliberately stole 1 per cent? And the buyer has as much right to do it as the shipper has to add that much to his weights.

If the buyer has good facilities for weighing he soon says: "Don't buy any more grain from So-and-so. He adds 1 per cent, or his grain is dirty," etc. It pays to be fair to the buyer. The shipper who gives good weights and grain fully up to contract is the one the buyer goes to first, knowing there will be no discount on the quality or correction in weights. Take a shipper who has every facility for handling grain in a proper manner—one who does not let a car go out unless it is fully up to grade and every pound in that his invoice calls for, and you will find this shipper has little complaint to make against the buyer. The buyer knows that this shipper is an up-to-date business

man and accords him fair and business-like treatment.

Another thing in which the "Golden Rule" should apply. If the shipper has grain sold and the market declines sharply, let him not ship any more to the car than he would had the market advanced. If he does, the buyer may think the shipper is trying to take advantage of him, and if there is any excuse on account of quality may reject the stuff. If the shipper wants friendly relations with the buyer let him make his grain right up to contract, be careful of his weights and he will have a good feeling for the man to whom he sells.

All troubles between shipper and buyer are not the fault of the shipper, however. There are buyers and buyers, ranging from the little fellow who weighs on steelyards, bag at a time, to the mill or elevator that weighs your grain at a single draft. No doubt some of the shippers here to-day have had experiences with the steelyards man. Some call it "drug store" weighing. He will weigh a car in from 25 to 200 drafts and swear they are absolutely correct. He may be honest in it, but it is hard to satisfy the shipper who has weighed his grain on a 500-bushel hopper scale that he is. This buyer and the shipper who estimates his stuff work well together.

Another class of buyers is represented by the man who when the market has declined looks in the door of the car, picks out a few cobs, some red grains, a few rotten grains and dirt at the door, then wires that grain can be used at a stated reduction or refuses it entirely. This class of buyers works well with the shipper who considers it too much trouble to reclean his grain.

And there are buyers who have good facilities for weighing, or are careful weighers if their facilities are not of the best, who do not find fault and reject the grain because the market has declined. An occasional one will reclean the grain rather than reject it, if the shipper is not an old offender. Buyers of this kind furnish the best outlet for the shipper who weighs his grain and cleans it.

I have tried to point out some of the shortcomings of both sides in this question. In the West the grain trade has improved greatly in the past few years. The Western shipper is interested in having good, honest Eastern buyers. The way to get them is to furnish what you sell—good, clean grain and correct weights. An Eastern buyer will not be unfair, though he is inclined that way, unless he has some ground for complaint. If your grain is clean he can't kick on that; if weights are correct, his chance there is slim; if he is downright dishonest, you can soon spot him if you are all right at your end of the line. It is an easy matter, then, to deal with him as he deserves.

The trade will soon be very pleasant, if the business relations between seller and buyer continue to improve as they have lately.

DEMURRAGE CHARGES.

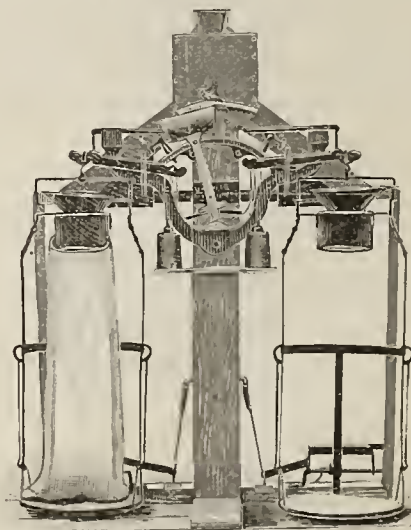
A press telegram from Washington says that the Interstate Commerce Commission, in the decision in the case of Pennsylvania Millers' State Association against the Philadelphia & Reading Railway Company and others, has held that forty-eight hours is an unreasonably small allowance of time for unloading where any portion of such time has to be consumed in attending to the preliminaries necessarily antecedent to the actual process of unloading. As to grain, flour, hay and feed consigned to and deliverable at interior points in the territory of the Philadelphia Car Service Association, the carriers are required to cease and desist from charging demurrage until the expiration of a reasonable time for unloading after the cars have been placed for unloading and notice of such placing has been given the consignee or other proper party. The commission further holds, however, that forty-eight hours is a reasonable time for the actual unloading.

The Commission also decides that by Section 1 of the Act to Regulate Commerce storage is named as a service in connection with transportation, and the charges therefor are required to be reasonable

and just; that the schedule of rates required by Section 6 of the Act to be printed, posted and filed with the Commission should state, among other terminal charges, the rules and regulations, if any, of the carrier in relation to storage.

THE CUTLER BAGGING SCALE.

The Cutler Bagging Scale, patented December 4, 1888, is the result of an experience of thirty years in handling and weighing grain in bags. The patentee's aim originally was to produce a scale for their use, which should be accurate in weighing, simple in construction, durable and capable of being rapidly operated. Their success in these experiments more than fulfilled their expectations, and for ten years past these scales have been in use in the large grain mills in New England, demonstrating their superiority over any other system of weighing bagged grain, meal, etc., in even weight packages. The scales are in pairs, there being two scales in one frame, operated by one man, who removes and ties the full bag, while the empty package is automatically filled and weighed. The stream of material to be weighed is spouted direct to the empty bag, which is suspended from the scale beam in an ingenious manner with the working parts in plain sight. After the automatic weighing has taken place, the package must just balance a standard weight, and any inaccuracy would be apparent at once and quickly corrected by the operator. This is important, as it gives virtually double weighing, one being a check on the other. When the desired weight is arrived at, the flow of grain is automatically diverted to the companion scale, while the full bag is removed and the empty package placed on the bag-holder ready to be filled. By this arrangement the flow of grain is not stopped, but is continuous, and no time is lost opening and closing spouts. The scales can be operated as rapidly as a man can remove and tie the bags; and the manufacturers, the Cutler Company, North Wilbraham, Mass., have testimonials from people weighing 100 bags of 100 pounds each per hour, which means a capacity of 1,000 bags per day of ten hours for one pair of scales. The bottom of the bag holder being adjustable, it is adapted for use



on bags of different lengths and can be changed while in operation.

The scales are much superior to a platform scale, as the latter has from six to eight bearings out of sight, making just so many points of contact liable to get dulled and out of order. The Cutler Bagging Scale has two knife-edged bearings in plain sight of the operator, which cannot get out of order without the fact being instantly detected. Repairs are reduced to a minimum, as new bearings can be substituted in five minutes, if necessary. All material used in the manufacture is of the best quality, making the weighing machine practically indestructible, and can be used years at no expense for repairs. Those who are interested may obtain circulars from the Cutler Company of North Wilbraham, Mass.

San Francisco bagmen state that the demand for grain bags from the North Pacific coast was so strong this season that it was impossible to fill all orders.

A MODERN COUNTRY ELEVATOR.

The accompanying picture represents the new elevator recently built at Anchor, Ill., for the Illinois Central Railroad Co., to be operated by Rogers-Bacon Company of Chicago. The elevator building proper is 140x32 feet on the ground and 74 feet high to the ridge of the cupola, and is built in two sections. The working house is 60 feet long, built of the usual crib construction, and is somewhat higher than the balance of the elevator, which is to be used for oat storage exclusively. The walls and partitions are built of studding sheathed.

The power house is 12x12 feet square, built of brick and fireproof, with concrete floor and sheet-iron roof. It adjoins the building, as shown in the engraving. Power plant consists of a 16-horsepower Burrell Gasoline Engine, connected directly to the main shaft by means of a friction clutch.

The driveway is also built separate from the main building, the floor being not over four feet

The elevator was designed and built by G. T. Burrell & Co. of Chicago, Ill.

FIRE ESCAPES AND PROTECTION OF EMPLOYEES.

In the October number of the "American Elevator and Grain Trade" the subject of the protection of grain elevators against fire was discussed in a somewhat lengthy article. At this time it is desired to change the order by dwelling at some length on the facilities afforded for the protection and escape of those employed in grain elevators, in case of a conflagration.

Fire escapes on all high buildings are required by law, which it is expected will be enforced by the local authorities in a decisive and energetic manner. Grain elevators especially have been made subject to the law for obvious reasons. The extreme height at which it is necessary to build them put the several employees who at all times are obliged to work on the upper floors, in a posi-

of the building where the stairway is located, and if it were without any outside ladders to enable the employees to escape, they would undoubtedly be caught (to use a very common expression) "like rats in a trap."

If a plant is devoid of these very necessary appurtenances, which should be placed on the outside of the building at each end of the structure, so as to be brought into immediate use in case of fire, then no time should be lost in equipping the house with them. This is indeed a very serious matter, but the fault is easily remedied, and those owners whose plants have been neglected in this respect would do well to think of this matter very seriously, for in the event of fire the interior exits would in all probability be cut off by the flames or smoke and the inmates who should be so unfortunate as to be engaged on the upper floors or in the cupola at the time would assuredly be in great jeopardy, while the absence of the outside fire escapes might result in a serious loss of life.

Owners and those otherwise interested in the operation of these properties should not wait for actual experience to bring them a realization of the fact that lives may be lost owing to the absence of the outside escapes, and of their awful responsibility for neglect or not equipping their elevators with this very rational life preserver, but they should so prepare their elevators that in the event of fire, even should loss of life occur, they would be able to console themselves with the thought that they had done all in their power for the safety of all the men in their employ. And this will undoubtedly be more comforting to their minds than the knowledge that it was owing to their negligence in this respect that a life or lives were lost. And this, too, without considering at this time any question of their legal responsibility for loss of life in the absence of the fire escapes specially required by the law of the state.

MANITOBA GRAIN STANDARDS.

The Western Grain Standards Board met at Winnipeg, Man., on October 26-27, to make standards for grades of grain not provided for by the grain inspection act of parliament now in force. The following gentlemen were present: S. Spink, chairman; C. C. Castle, elevator commissioner; C. Johnson, Baldur; Peter Fergusson, Kenles, Assa.; W. B. Underhill, Melita; Alex McGee, Montreal; R. J. Phin, Mossomin; C. P. Watts, Toronto; James Riddell, Rosebank; M. M. McLaughlin, Toronto; George M. McCulloch, K. Campbell, Brandon; John McGee, Carrievale, Assa.; W. A. Matheson, C. A. Young, F. W. Thompson, Winnipeg; F. E. Gibbs, grain inspector, Fort William; David Horn, chief grain inspector, Winnipeg, and C. N. Bell, secretary.

Samples of wheat from all parts of Manitoba and the Northwest Territories of Canada and also of dried tough wheat were on hand. After a deliberation of two days the Board on October 27 adopted the following resolutions, which were, later in the same day, indorsed at an informal joint meeting of the Board with the Winnipeg Grain Exchange:

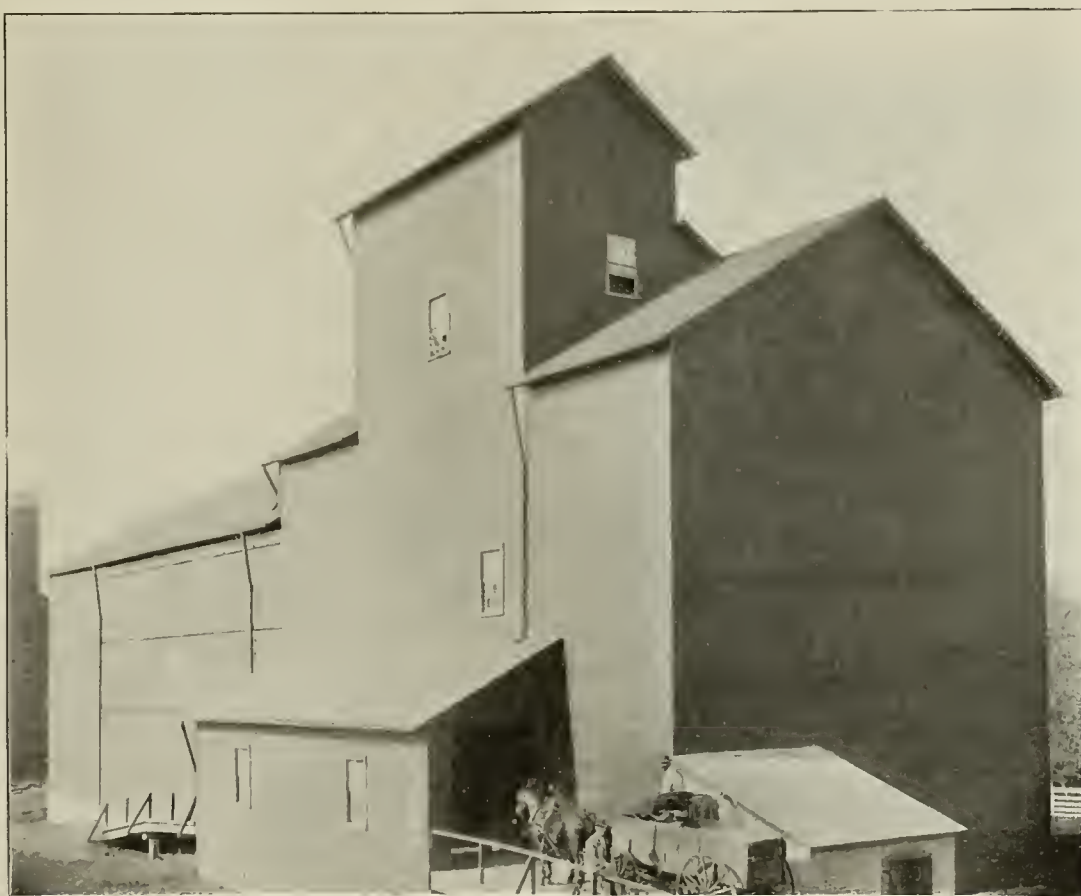
Resolved, That it is the opinion of this Board that the methods of handling Manitoba wheat would be best served by making the following changes in the schedule of grades, viz., that the grades of No. 2 Hard and No. 1 Northern be consolidated under the name of No. 1 Northern, and having the present qualifications of No. 1 Northern with no less than 60 per cent of hard wheat.

Resolved, That name of No. 2 Northern be changed to that of No. 1 Manitoba spring; the grade having not less than 45 per cent of hard wheat, and weighing not less than 58 pounds per bushel; and that any wheat not good enough to grade No. 1 Manitoba wheat be graded as No. 2 Manitoba spring, in the discretion of the inspector.

With regard to grading dried wheat, the following resolution was passed:

Resolved, That in cases where tough wheat has been dried, the inspector be instructed to inspect out of terminal elevators wheat so dried on a clean certificate, when he considers it equal to the standard of such grades. This is to apply to commercial grades only.

These changes, which must receive official sanction before taking effect, will, if carried out, make Manitoba grading almost equal to that of Duluth.



ILLINOIS CENTRAL RAILROAD ELEVATOR AT ANCHOR, ILL., OPERATED BY ROGERS-BACON COMPANY OF CHICAGO.

above grade, which obviates the necessity of steep approaches.

The machinery consists of two elevator legs, each of a capacity of 2,000 bushels, which are driven by means of Burrell Head Shaft Drives. There are also upper and lower conveyors of the drag chain pattern, which, like the balance of the machinery, are equipped with clutches, so that they may be operated without operating the balance of the machinery. Rope transmission also figures very largely in the construction, there being no belts in the elevator except the elevator belts.

The elevator has also a 300-bushel Fairbanks Hopper Scale, with garner of the same capacity, the scale being sufficiently elevated so that cars can be loaded without trimming.

This elevator is a typical "one-man elevator," all machinery and spouting being equipped with necessary appliances, so that everything can be operated from the lower landing of the stairway, and one man can both take in grain and ship at the same time.

The station at which this elevator is located is one of the most important country stations operated by the Rogers-Bacon Company. The elevator, which has 135,000 bushels' capacity, was built with a view of obtaining the greatest storage capacity possible within such dimensions. This feature is one of the most important entering into the construction of the elevator, there being not one available inch of space which is not used for storage.

tion of more or less danger under the best of circumstances. Even in the plants that are equipped with this very necessary mode of reaching terra firma from the outside the employees have by no means an easy task, for if in the event of fire they should be forced to take this means to save themselves, the flames, smoke and undue excitement caused by the necessity of making a hasty exit from the building from some hundreds of feet above ground, may cause a slip even from the escape, and death would undoubtedly be the result. Nevertheless the chances for escape are a great deal better with than without the regulation fire escape.

Chicago and Cook County can boast of having about 50 per cent of their elevators now equipped with outside iron ladders, with heights ranging from 40 to 170 feet to the top of cupolas. These plants, as a rule, stand in somewhat isolated locations. Access is not always of the best to those that are more centrally located, on account of the various railroad tracks, and if the fire department ladders could be brought into use in time the upper floors of such elevators could not be reached by the department owing to the extreme height.

Fires take place without announcing their coming beforehand, and they do not give the employees timely warning of what is to be, but they come all too suddenly to be pleasant for all concerned. Hence in those elevators which have only one means of egress from the upper floors, and that through the stair tower, if the fire should start in that end

THE OHIO ASSOCIATION.

The fall meeting of the Ohio Grain Dealers' Association was held at Columbus, October 16. President S. H. Grimes of Portsmouth, in calling the convention to order at 10 a. m., spoke briefly upon the good results which the Association had already obtained for the grain dealers of Ohio and the benefits that would accrue in the future if the trade would work together for the common good.

Secretary J. W. McCord, Columbus, read the minutes of the annual meeting, held at Put-in-Bay, which were approved as read.

A letter was read by the president, from Vice-president E. A. Clutter, of Lima, Ohio, in which he stated that he would be prevented from attending the meeting on account of illness. Mr. Clutter gave an experience of the shrinkage of corn and also called the attention of the Association to railway rates as follows:

I herewith submit a test made by an experienced warehouse man, Mr. J. F. Wetherell of Spencerville, our partner at that point. He weighed 100 pounds of fair average new corn, as it would be delivered to country elevators the country over at this time, and placed it where it would dry out gradually. It lost four pounds the first 22 hours; three pounds the next 24 hours and in the next 32 hours it dried out five pounds, or twelve pounds in all in 78 hours, and when shelled weighed just 73 pounds. The condition then was not absolutely dry, but so much so that it would grade in any market. From this it will be seen that to crib corn we must count upon a loss of 12 per cent, and on large cobbled corn a still greater loss.

Another matter I would call to your attention. On November 1, the railway rates on grain are to be advanced to a Chicago basis of 17½ and it is said to a 20-cent basis on December 1. That is manifestly unfair to Ohio and Indiana shippers as a much larger part of the corn and oat crop of these states moves out from November 1 to March 1 than from states farther West. The nature of their corn is such that it's better cribbed for a time. But the worse feature is the chance it gives for notorious cutting of rates, such as occurred last February through Toledo—via certain lines, while the main trunk lines across the states held rates firmly. It is apparent as soon as the receipts begin to run a little short of the requirements, the large lots West are picked up on cut rates and a general demoralization of prices is sure to occur before the railways make a regular reduction. That Ohio and Indiana should pay such a large rate per ton per mile is outrageous—a rate much more than will be paid from the Mississippi next March.

We believe this is a subject that our Association should put in shape and present to the legislature.

The question of the advance in freight rates was discussed and in order that some action be taken on the subject E. W. Seeds moved that the suggestion of Mr. Clutter be referred to a committee of three, which should report at the afternoon session.

President Grimes appointed on this committee E. W. Seeds, Columbus; George S. Schaeffer, Dayton, and M. Gunning, Chillicothe.

The committee later made the following report, which was adopted:

Whereas, It is the sense of this Association that a fair rate of freight firmly maintained for the period of crop movements is of the greatest advantage to both shipper and railroad. Therefore, resolved, that our secretary be instructed to advise the rate making authorities that we request, first that the freight rates for this corn crop be not advanced above a basis of 17½ cents Chicago to New York, for which notice has already been given, effective November first.

Second, That such rate be firmly maintained until at least March 1, next, within which period the bulk of the Ohio corn crop will be moved.

Third, That in the future the rate which is to apply to the movement of a corn crop be made effective not later than November 1, of each year, and then maintained for the succeeding four months and that at least thirty days' notice be given of such rate so that contracts may be entered into intelligently.

The question of the shrinkage of new corn was taken up in a general discussion.

E. A. Grubbs of Greenville related that a shipper of that town had filled two sacks with 80 pounds of corn each. After drying four days over a retort in the gas plant one sack had lost 14 pounds and one 14½ pounds. A few days more of drying gave a loss of about 20 per cent.

J. W. McCord: I made a little experiment with thirty-two ounces of new shelled corn, drying it to

the condition of No. 2 and found that it had lost 10 per cent, showing a considerable moisture in the corn.

M. E. Weimer: Two years ago last December I placed a sack containing 72 pounds in our elevator and allowed it to dry out gradually. By the month of June it had lost eleven pounds.

The next subject which engrossed the attention of the Association was that of buying corn by the 100 pounds. The discussion which followed showed various opinions among the dealers.

President Grimes in introducing the subject said that in the northern part of the state dealers bought by the 100 pounds and that there had been some talk among the dealers of framing a resolution looking to the adoption of the same method of buying in the southern part of the state.

C. A. Bissell of Antwerp said that he had adopted the plan of buying by the 100 pounds about a year ago and found the method very satisfactory.

M. H. Long, Lima: Our experience in buying by the 100 pounds has been very satisfactory and I wish we could adopt the system in the case of small grain.

J. P. McAlister, Columbus: I think this is prac-



S. H. GRIMES, PRESIDENT.

tical. It has been a hobby of mine for years that we buy by the 100 pounds. I am strongly in favor of it.

G. W. Lamb, Hooker: I am in favor of the 100 pound unit, but in our territory each farmer wished to obtain prices on the basis of the bushel so we did not find the plan satisfactory and soon abandoned it. I believe in the system if it can be adopted by everyone.

Mr. Bissell, in answer to a question from Mr. Schaeffer if he found any opposition from the farmers in introducing the cental, said that at first a few of the farmers asked why they had changed the system, but that now they were fully informed upon it and gave no further trouble.

President Grimes appointed C. A. Bissell, C. E. Grace and E. M. Fullington a committee of three to report on the advisability of the adoption of the cental as a unit in buying, at the afternoon session.

AFTERNOON SESSION.

President Grimes called the meeting to order at 2 p. m. The report of the committee on the adoption of the cental as a unit in buying corn was read by E. M. Fullington as follows:

We, your committee, to whom was referred the question of the adoption by this Association of the system of purchasing ear corn by the hundredweight instead of by the bushel, beg leave to report that we favor the adoption by the members of this Association of the hundredweight as the unit, and recommend the same to the consideration of the Association.

J. P. McAlister, Columbus: I am in favor of the resolution and think it would be well to advise the

trade by circular to change to the cental at a certain time.

E. M. Fullington: Although in favor of the resolution, yet I do not think we should proceed too hastily in the question. It must be adopted by all the members to be a success.

Mr. Gunning: I think we should first get those to whom we sell to bid by the 100 pounds and then we would have little trouble in getting the farmers into line.

J. Allen, St. Johns: The system has been in operation in our neighborhood for four years and works satisfactorily.

E. W. Seeds: I doubt, even though this method works satisfactorily in certain parts of Ohio, if that fact will warrant its adoption in other localities. We must proceed in this gradually and I think that putting it in the form of a request to members to buy by the 100 pounds would be a step forward.

L. W. Dewey, Blanchester: I think we should get the opinion of the country shippers before adopting any resolution. I think that if all would adopt the plan they would never go back to the old method.

E. A. Grubbs: I believe that the plan should be presented to dealers by counties. As new corn will soon move some method must be adopted quickly.

On being put before the Association the resolution was lost.

E. M. Fullington moved that the Association recommend to its members, through its secretary, the adoption of the cental system in buying ear corn. The motion was carried.

E. W. Seeds moved that the secretary correspond with some dealer in each county and try to effect an organization by which the cental system in buying be put in operation not later than January. Carried.

E. M. Fullington of Marysville read a paper on "The Ideal Country Dealer."

President Grimes spoke of the importance of selling to a near-by buyer and asked for a discussion of this subject.

C. E. Gross, Circleville: I have been in the grain business for a long time and have always sold to near-by buyers and while I have done so in fear and trembling, yet I have been always well treated.

P. R. Hyson: I find that those who have good cleaning machines are those who have the best grain. The country buyers should clean the grain and get its best grading.

Paul Wood: I find that some dealers pay the same price for corn of all sizes and conditions. Damaged grain should not be received at the market prices for good grain.

L. W. Dewey said that if the dealer would object to receiving poor corn the farmer would soon learn that he must accept a lower price for such corn.

On the subject of arbitration, E. W. Seeds favored the addition of three country dealers to the Association's arbitration committee. He said that it was better to arbitrate than to go to law and that in arbitration a dealer presented his case to those who would understand it. He suggested the appointment of J. B. Van Waggoner, Myron Silver and T. W. Baum in addition to Seeds, Scott and Herr of Columbus.

E. C. Wagner: I think we should be very careful in making up our arbitration committee. I would suggest that we have on the committee one track buyer, one elevator man and one railroad man.

Mr. Fullington thought that a railroad man should not have a place on the committee.

On motion by Mr. Gross the president appointed on the committee T. R. Herr, Columbus; Myron Silver, West Jefferson; T. W. Baum, Duvall.

E. A. Grubbs read a paper on "The Relations of Buyer and Shipper."

President Grimes in a talk upon "How to Procure the Best Government Reports," said that to procure good reports the government should employ men for that especial purpose who should give the subject their entire time. The country would then obtain reports that would be of value.

J. W. McCord: Shippers seem disposed to advance the prices on corn for October shipment. By holding prices down now you will be able to continue business after November 1, when rates ad-

vance. In regard to the scoop-shovel man, Mr. McCord said that they had about vanished, yet once in a while one still cropped up. One of this fraternity had recently caused considerable trouble in the western part of the state.

By a rising vote nearly all the dealers present expressed their preference for Buffalo as the place for holding the annual outing in 1901.

Mr. Seeds moved that a committee of five be appointed to make arrangements for the Association to go to Buffalo in 1901 for its annual outing and make the best arrangements possible for transportation. Carried.

E. M. Fullington: I move that a rising vote of thanks be tendered the Columbus dealers for the very sumptuous dinner and various other courtesies shown us.

L. W. Dewey moved the appointment of two delegates from the Association to attend the annual meeting of the Grain Dealers' National Association, held at Indianapolis, November 20 and 21. Carried. The meeting adjourned.

CONVENTION POINTS.

The "American Elevator and Grain Trade" was represented by John E. Bacon.

The cental is of the opinion that he wouldn't speak to a bushel if he'd see one.

C. A. Foster of Carnegie, Pa., left some handsome souvenirs with the dealers in the shape of 5-foot tape measures in a neat celluloid case.

C. A. Bissell, representing the People's Elevator Co. of Antwerp and the Seeds Grain Co. of Columbus, had each a pocket notebook for the dealers.

Columbus dealers in attendance included J. W. McCord, J. P. McAlister, A. S. Tingley, Percy R. Hyuson, J. T. Burgett, Ray Herr, E. R. Woodrow, E. W. and K. B. Seeds.

A very elaborate luncheon to the dealers at the Neil House was given by McCord & Kelley, James P. McAlister & Co., Percy R. Hyuson, Tingley Bros., Scott & Woodrow, C. S. Herr & Co. and The Seeds Grain Co. The larger part of the dining room was occupied and each one was a guest of honor, to whom the waiters served a menu that was evidently a chef d'œuvre from the master of the kitchen. The after-dinner speakers were President Grimes, Huntington Fitch and J. W. McCord. Very little time was devoted to speech-making, however, as the time had arrived for the calling of the afternoon session.

Among the dealers present were: Paul G. Wood, Lilly Cheppel, Z. F. Downs, Chillicothe; S. E. De Wolf, Marion; J. Allen, St. Johns; C. F. Barnhouse, Morrall; C. N. Adlord, Piqua; T. W. Baum and J. T. Burgett, Duval; J. Curtiss, Pleasantville; Burton Cain, Outville; D. Brubaker, St. Paris; O. S. Brecount, Thackery; C. A. Bissell, Antwerp; J. C. Belt, Pickington; V. E. Campbell, West Milton; O. P. Chaney, Canal Winchester; L. W. Dewey, Blanchester; H. I. Grimes, Portsmouth; E. M. Fullington, Marysville; P. W. Gage, Sunbury; E. A. Grubbs, Greenville; J. P. Gundy, Carroll; M. E. Weimer, Rosewood; H. C. Wagner, Pleasant Corners; M. Gunning, Chillicothe; H. Hansberger, Millersport; F. Gallagher, West Jefferson; J. O. Gooding, Lewis Center; Col. C. E. Grace, Circleville; A. Herr, Mingo; F. P. Hastings, Cedarville; J. R. Johnson, Baltimore; W. Hardman, Cable; C. B. Jenkins, Marion; E. C. Wager, Grove City; J. J. Stevenson, Amanda; H. M. Shelhamer, Bremen; W. T. S. Kile, Kileville; Charles Schreel, El Dorado; G. W. Lamb, Hooker; T. M. Latham, Hayden; D. W. Long, Conroy; M. H. Long, Lima; George S. Schaeffer, Dayton; C. Rhonemus, Reesville; J. E. Pierson, Condit; W. O. Patty, Fletcher; J. G. Myers, Pleasant Hill; J. H. Miller, Lockville; M. H. Long, Lima; L. B. Masou, Powell; J. H. Motz, Brice.

Probably the most valuable cargo of grain ever carried on the lakes was taken out of Duluth by the new steamer Howard Shaw about November 2. It consisted of 260,000 bushels of flaxseed consigned by A. D. Thompson & Co. to Buffalo. The seed was insured for \$1.50 per bushel, making the cargo worth \$468,000.

HOW THEY DID IT.

The manner in which the Milwaukee bucket-shops obtained Chicago Board of Trade quotations was revealed by the testimony taken by the commissioner appointed by the court for that purpose. The secret was explained by Oscar M. Stone, who, operating with Geo. F. Hoyt, as the Independent Telegraph Company, supplied different bucket-shops in Chicago, Milwaukee and elsewhere.

Their method was to send men around to look in through the doors of the commission houses at Chicago and see the figures on the blackboards, which were then either signaled to a certain office window or else sent to Stone's office by the nearest telephone. In one instance an office was established across the alley from a La Salle Street commission house, and the figures on the board were read through an opening and the result telegraphed to a certain office. The most ingenious part of the scheme was the system of signaling established. It is not known exactly how it was all done, for the inventor, when on the stand, refused to testify wholly. He went so far as to say that it consisted in standing in certain positions, but refused to explain in detail, as "his brain was his capital" and he "did not propose to give away his stock in trade."

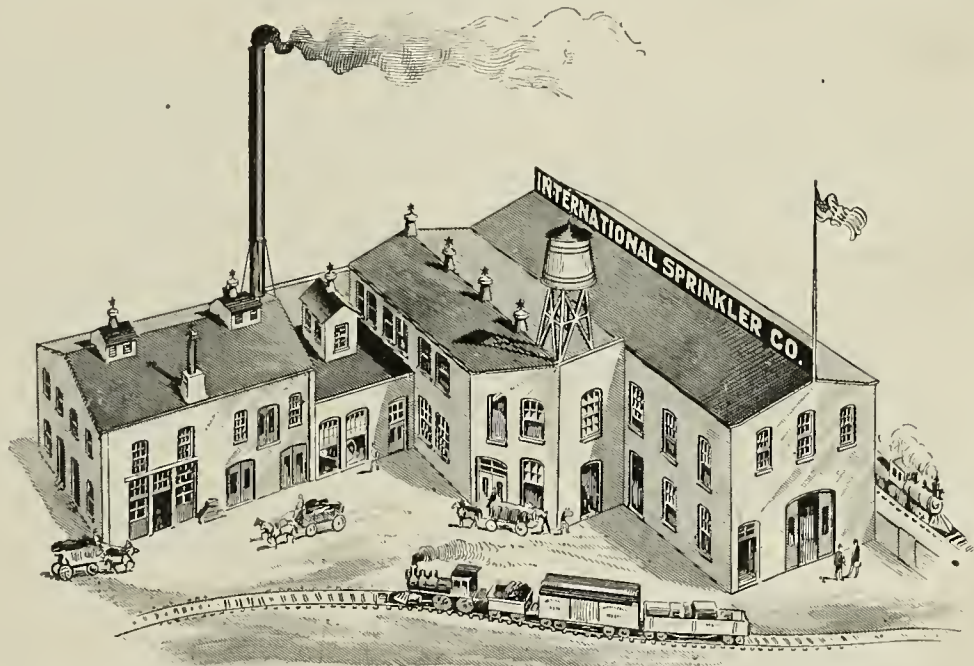
Not only were Chicago quotations obtained in this

ber 31 alone, fourteen boats took out 1,795,173 bushels, of which 903,253 bushels were corn and 596,520 bushels oats.

THE INTERNATIONAL SPRINKLER.

The automatic device for fighting fire known as the "sprinkler system" is not a new idea. Indeed, the first patent for such a device was granted in England as early as 1763, and many others appeared during the century following. None of these earlier patents seem ever to have been put to practical use, and it was not until 1875, when the Parmalee sprinkler was invented by a resident of New Haven, Conn., that the idea was able to attract public attention and receive consideration. Of late the system has grown very rapidly into public favor, as appears from the activity of the shops turning them out.

The International Sprinkler Company, under the control and management of Merchant & Co., Inc., for example, has increased its business at such a rapid rate that the old factory was found entirely inadequate, and a new mill was accordingly constructed. Some idea of the energy of the management may be gained from the fact that the orders received during the months of August and



NEW FACTORY OF THE INTERNATIONAL SPRINKLER COMPANY AT PHILADELPHIA.

way, but also those of the London, Liverpool and other foreign markets. The business must have been profitable, since Chicago houses taking the service paid \$20 a week each for it, while those out of the city paid \$50 each. In Chicago the quotations were sent in one instance through an underground pipe and in another over the tops of buildings via abandoned telephone wires, which Stone's electrician located and utilized.

The Independent Telegraph Company cut all its wires when Judge Kohlsaat issued his injunction against them. Then Moody & Co., who received Stone's figures and supplied them to certain Milwaukee houses, went out of existence. The Milwaukee men thereupon began taking quotations from Minneapolis, which, no doubt, serve the purposes of a bucket-shop quite as well as any others.

CHICAGO DOING A BIG BUSINESS.

As the closing of navigation approaches, Chicago's shipments of grain have lately been quite phenomenal, entirely aside from the railway tonnage of grain. For the week of October 13 lake shipments aggregated 5,066,000 bushels, or nearly 1,000,000 bushels per day, and an increase over the previous week of 2,020,000 bushels. Of this 3,554,000 bushels were corn, of which 80 per cent went to Buffalo. The following week's work was about as heavy, winding up with about 2,000,000 for the last two days of the week. The bulk of the shipping sales was by Patten and Armour; but all the cash people effected some, making it very plain the consumptive demand was genuine and general. Again on Octo-

September, 1900, more than equaled the business of the entire twelve months of 1899, a gain of over six hundred per cent.

The accompanying cut shows the new factory which has just been finished at Philadelphia. It is a very complete plant, thoroughly equipped with all modern appliances, which will enable the company to handle a very large tonnage of pipes, fittings, etc. In fact, its facilities are now second to none in the business.

The "International" sprinkler is approved by the various insurance bureaus throughout the country, while many testimonials have been received from leading business houses of the country attesting the excellence of the International's work. All information of this character, as well as that relative to the system in general, will be furnished with pleasure to prospective customers.

The company has its main office in Philadelphia, with a southern office in Atlanta, Ga., and is represented by the branch offices and the traveling representatives of Merchant & Co., Inc., which are located in the principal cities of the country. Mr. Clarke Merchant is at the head of the company, and the general management is in the hands of Mr. Powell Evans, who are supported by abundant capital.

Elevator A at Galveston is now in complete working condition, and has been for some time working continuously transferring grain from cars to ships.

Exporters have fixed the wheat standard for Washington, Oregon and Idaho for 1900 at 59 pounds for Walla Walla, and 59½ pounds for blue-stem.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

A BUSINESS REQUISITE.

Editor American Elevator and Grain Trade:—You are no doubt aware that this firm has just organized, and knowing, as we do, that to conduct our business intelligently and keep thoroughly posted we should have your valuable paper, we therefore inclose \$1 for which please put us on your list and oblige,

Very truly yours,

THE McQUILLAN GRAIN & HAY CO., Cincinnati, Ohio.

OPPOSED TO 60-DAY QUOTATIONS.

Editor American Elevator and Grain Trade:—We do not like the rule of quoting futures for two months only. We find it to be a great disadvantage in our business not to be able to hedge for more than 60 days or a part thereof. The time slips around quickly and we are compelled to take in our hedge at a disadvantage very often or keep changing to another future month with one-eighth of a cent costs and nearly always a loss besides. It is all right for the commission man, but it beats the dealer every time.

Yours very truly,

JAKWAY & MURRAY.

Goodland, Ind.

QUIT STORING FOR FARMERS.

Editor American Elevator and Grain Trade:—Am glad to say that I had the pleasure of attending the meeting at Peoria and that my views on storing grain for farmers are quite in accord with those of the majority of the dealers.

I have in the past stored some oats for farmers. I found it very unpleasant and very unprofitable. When they do sell the grain they want you to throw off one-half if not all the storage charges, and they will not allow anything for shrinkage.

My experience has been such that I have discouraged the business and quit it altogether.

Respectfully,

R. E. HOWE.

Mansfield, Ill.

ABANDONED STORAGE PRACTICE.

Editor American Elevator and Grain Trade:—Our firm has for some time abolished the practice of storing wheat for farmers in our elevators; in fact, it is only in rare and extreme cases that we allow farmers to store any kind of grain with us.

We find that the practice of storing grain does not pay; takes up room which we can always utilize ourselves, and last, but not least, it gives any competitor, if he wishes to do harm, a chance to make a big offer to the farmer whom he knows has grain stored with us, and thereby create discontent and dissatisfaction all around.

We believe this practice should be done away with entirely.

Yours very truly,

ROBERTS, MOSCHEL & MOSIMAN.

Morton, Ill.

STORED GRAIN COMES HIGH.

Editor American Elevator and Grain Trade:—I have never stored grain for anyone but myself, and I don't expect to. I sometimes advance money on grain and stock, but have about quit that, as I generally have to give more to get the stuff after I have loaned on it.

Our miller here stored wheat for farmers, giving them the privilege of coming in at any time and settling at the market price. I refused to do this, stating that if I stand the losses I want the profits.

Whenever a man wants money on anything, I say, Yes, I will give you the money if we agree on price. If we cannot agree on the price, then I tell him that I have no money to loan.

My experience has taught me that such accommodations given for nothing cost the dealer his trade in the long run. Others may do as they please, but I will not store grain nor hand out

money to the farmers unless the price and time of delivery is fixed.

Yours respectfully,

DAVID H. SPROUL.

Vera, Ill.

STORED GRAIN IS HARD TO BUY.

Editor American Elevator and Grain Trade:—Our experience with storing grain for farmers is that it is detrimental to both farmer and dealer and causes more dissatisfaction than any other one thing in the grain trade, especially when the market is on a declining basis. Then they become dissatisfied and begin talking farmers' elevator, which may finally result in the building of same.

We built our storage for our own use. Why give it up to others if any chance for profit can be seen by filling same? It is also harder to buy grain when in store than when in the farmers' hands.

Respectfully,

W. F. STARZ & CO.

Kenney, Ill.

FORCED TO STORE BY COMPETITION.

Editor American Elevator and Grain Trade:—I was at the Illinois dealers' meeting at Peoria and heard the discussion on storage.

The storing of grain for the farmers by country dealers is one of the worst things that can be practiced for both parties. We wish that a law could be enacted imposing a fine upon the dealer for storing.

We are forced by our competitors to do some storing, but we do as little as we possibly can. Have just had a talk with our competitor, but he will not agree to quit storing. Push the storage question and have it prohibited if possible.

Yours respectfully,

TITUS BROS.

Steward, Ill.

SHOULD INSIST ON STORAGE CHARGES.

Editor American Elevator and Grain Trade:—We cannot see why any grain buyer should not store grain for a farmer as long as he gets a reasonable sum for so doing.

The abuse in the storing of grain is that the grain dealer fails to make the charge for the work done by him. If he fixes his charges and faithfully collects the same, we think there will be very little demand for storing. And all he stores will be clear profit over and above the prices he is regularly paying.

We store for any farmer so desiring and collect storage for the same. When we stored and charged nothing there was hardly a farmer but what wanted to hold his grain from a month to a year. Now they generally sell before they bring it in, or within a very short time. The storage bugaboo is too much for them and they dispose of their grain before any charges accumulate.

Yours very truly,

G. C. McFADDEN.

Havana, Ill.

A SATISFACTORY STORING EXPERIENCE.

Editor American Elevator and Grain Trade:—Referring to the subject of storing grain for farmers, so far as my experience goes in that line of business I cannot see anything illegitimate in it. I think it is purely a business proposition, and with me it has been quite satisfactory. The only unsatisfactory feature has been that competition, out of jealousy and a disposition to resort to unbusinesslike principles in order to pull trade from someone else through the medium of storage, gives opportunity for abuse.

In many ways this means has been used selfishly, and in many cases to such a degree that the business has been a losing one. But as a matter between farmer and dealer there is nothing in the way of its being mutually profitable to both. It affords the farmer an opportunity to haul his grain in good weather when he does not care to sell. It gives the dealer an opportunity to have grain to move out during bad weather and scatters the business along more evenly, and saves great rushes of business and, on the other hand, great periods of no business.

I would say, however, until the average dealer can be schooled sufficiently to have a little stiffening in his backbone and do business on business

principles, the practice of storing had better not be indulged in. It is a means whereby misunderstandings can come and upset the entire business so that nothing can be made in that business, or for that matter, in the legitimate grain business.

Very truly yours, THEO. P. BAXTER.

Taylorville, Ill.

STORING A SOURCE OF DISSATISFACTION.

Editor American Elevator and Grain Trade:—We do very little storing for farmers, as we generally have no room for stored grain.

Our experience has been that it does not pay the farmer to store, hence we do not encourage the practice. Dealers who make a business of storing are in more or less trouble with their customers who have grain stored, and it takes up room that can usually be used very advantageously to themselves.

When we do store we invariably make a charge of one-half cent per bushel per month, and deduct same when grain is sold and paid for.

Yours very truly,

THE SIDELL GRAIN & ELEV. CO.

Sidell, Ill.

SET A GOOD EXAMPLE.

Editor American Elevator and Grain Trade:—Relative to storing grain, will say that we take grain on storage first thirty days free, except insurance; at the end of thirty days, storage goes on at the rate of one cent per month and we invariably collect it. Our storage account has been a very profitable one, and it has been running on this basis for many years. We have no trouble in collecting, patrons understand that we do not make this charge with the intention of allowing them to talk us out of it. If a man is so weak that he allows his customer to talk him out of storage which is justly due him, and dictate to him how he should run his business, the best thing such a man can do is to sell out to someone that knows how to do business.

I cannot see where the Association can take this matter of storage up and remedy the existing evil. In order to do it they would have to pump a new set of brains into about one-half of the trade. If every dealer will take a firm stand and conduct his business on business principles, regardless of what his competitor does, in nine cases out of ten it will be only a short time until his competitor will be following his example.

Yours truly,

THOS. COSTELLO.

OPPOSITION TO USE OF SPRINKLER SYSTEM.

Editor American Elevator and Grain Trade:—Chief Swenie and the Chicago Fire Underwriters' Association have had another inning regarding the fire department's persistent refusal to connect with sprinkler systems on the occasion of fires. This question has taken precedence over all others with the Fire Underwriters of Chicago, it being brought into prominence this time by the recent fire at the McCormick Harvester Co.'s twine plant on Blue Island Avenue.

The chief's seeming aversion and persistent disregard for this modern system of fighting fires is something that the Underwriters are endeavoring to analyze, but up to date they have not met with much success. The McCormick fire is only one of many that can be called to mind where the fire department have failed to use the sprinkler equipment. This matter was agitated several years ago at the time of the total destruction of the Springer Building.

We are at a complete loss to understand the chief's persistent refusal to make use of the hose connections provided for this purpose on the outside of plants equipped with the sprinkler system. The idea of fighting a fire with these new-fangled methods seems to be too much for our aged chief. There are some people on earth who still adhere to the methods of 50 years ago and who endeavor on all occasions to oppose modern ideas and improvements. Possibly Chicago's venerable fire chief belongs to this class.

We sincerely trust the time will not soon arrive when the department will be called upon to connect with the automatic sprinkler system of a Chicago

elevator. However, should the occasion arise, we hope the chief, whoever he may be at that time, will entertain somewhat more modern ideas and will make good use of these fire fighting appliances which, at great expense, have been placed at their disposal.

Yours truly,

ONE WHO IS INTERESTED.

SOME OPINIONS ON STORING GRAIN FOR FARMERS.

Editor American Elevator and Grain Trade:—I do not nor have I ever stored grain, nor will I ever.

Yours truly, W. H. COUNCIL.

Williamsville, Ill.

Editor American Elevator and Grain Trade:—All the grain dealers in this locality do storing for farmers, some free of charge. The majority, however, charge one-quarter of a cent per bushel per month. It is poor business and I am in favor of discontinuing it.

Respectfully, J. R. WAGNER.

Metamora, Ill.

Editor American Elevator and Grain Trade: In regard to storing grain for farmers, we are decidedly opposed to the custom and it should be abolished. Our rule is for 30 days only.

Yours truly, MERRITT BROS. & CO.

Dwight, Ill.

Editor American Elevator and Grain Trade: We give no free storage at all. All of our competitors store free but we cannot see that we lose any business by charging. We would much rather not store at all if the rest of the buyers in this section would do the same.

Yours truly, F. N. ROOD.

La Rose, Ill.

Editor American Elevator and Grain Trade:—I try to avoid storing grain for farmers. We have no wheat to speak of in this territory. I do not store corn or oats as a business.

Yours truly, C. W. SAVAGE.

Virginia, Ill.

Editor American Elevator and Grain Trade:—I have done some storing of corn for farmers but not much. I charge one cent per bushel per month and at the same time try to discourage the farmer from storing. This fall I have not had an application for storage of corn. It is nearly always against the farmer to store his grain unless he has cribs of his own. I store no wheat at all.

Yours respectfully, J. B. GOOD.

Forsyth, Ill.

Editor American Elevator and Grain Trade:—We are positively opposed to storing grain for farmers and never do anything in this line except to rent corn cribs. We would not do that only that the custom of the country forces us to.

Our experience and observation is that the practice is against the dealer and we say, quit it!

Respectfully yours,

HILL BROS. & CROW.

Blue Mound, Ill.

BENEFITS THE FARMER AT EXPENSE OF THE DEALER.

Editor American Elevator and Grain Trade:—As a rule, I am opposed to the practice of storing farmers' grain. I have known a very few men and firms who have made something by the storing practice, but nine times out of ten they get the worst of the bargain in the end.

If we look at the business principle of the plan we can see only one result and that is, the farmer is benefited at the expense of the dealer. Wherever the storing practice prevails, deliveries of wheat and oats are made from the machine and corn from the field. Thus the farmer is at once relieved of any further trouble with his grain, except to watch the market and when he thinks the price has reached the top, to sell and take his money.

We can but admit that it is a good thing for the farmer, but how about the dealer? How often does it happen that the cash price is above any future and not a car in sight. Then the dealer has to

hold the corn until he can sell. Mr. Farmer is clear out of the woods and don't have to worry as to whether the dealer gets cars or not.

While the above state of affairs exists, the dealer gets his elevator full and has to turn away his regular trade. But now I think I hear some reader say, don't the dealer get pay for storing the grain? To this I would say, Yes, he does sometimes, but more often he does not, for the farmer generally talks and bluffs the dealer out of all the storage. The farmer usually draws most of his money out on stored grain so that after a while the dealer gets nervous and wishes to close up the affair. Then he pays the farmer a good price and gives him most of the storage.

Now, as I said in the beginning, there are a few dealers who store grain just as they do other business and collect all their storage and charge interest on all money advanced. These dealers are all right and make some money. However, these dealers soon stop storing grain, as the farmers then get disgusted and sell their grain instead of storing. This is the right and proper way for both parties. I am acquainted with hundreds of local grain dealers and know that those who buy the grain and pay for it and make but few advances are the men who enjoy the most of life and make the most money.

Yours truly,

H. C. MOWRY.

Forsyth, Ill.

CROPS IN THE NORTHWEST.

Editor American Elevator and Grain Trade:—There perhaps never was a year in which the grain growers of the Northwest have had such a continued series of unfavorable climatic conditions. The early drought practically cut the average crop in two for a very large area of the Northwest grain belt, but had this unfortunate condition been the only damaging factor on the Northwest prairies, the farmers could have considered themselves very fortunate. About the time the drought had done its worst damage, which was just about harvesting time, there came a series of very heavy showers, which have made thrashing very difficult. There are thousands and thousands of acres of wheat land in the Northwest upon which the grain has been cut, shocked in the field, scattered, reshocked, only to be wet again and again until a great deal of it became practically worthless, and has not been drawn from the field. In many localities the farmers stacked their grain immediately after it was cut, and a great deal of it is still standing in stacks or now being thrashed. The farmers who took this method of curing their grain have been the most fortunate, and it is for this reason that the grain of the Dakotas has been so late in reaching market; and indeed a great quantity of the wheat now coming to market is in such bad condition owing to dampness and must that only about one car out of ten grades No. 1 Northern in the inspection yards. Many of the farmers are still holding the grain now being thrashed for the purpose of storing it in granaries or local elevators that it may be in better condition to send to market later.

Only about one-fifteenth of the yield, small as it is, has reached the wheat centers, and the balance, in all probability, will be coming very slowly from now until next spring. Considered from the standpoint of quality, Richland County, North Dakota, comprising the large area of the Red River Valley, will produce the best wheat and the average will be about ten bushels per acre. Had it not been for the late rains the quality would have been much better. Even in this locality a great deal of the grain has to be dried in granaries or elevators before it is in condition to send to market.

The southwestern part of North Dakota had a very poor crop and but very few shipments will be made from this part of the state. The main part of the state, from Castleton through to Devils Lake country, the crop is rated almost a total failure, and very little wheat will be shipped from this region. Many thousands of acres have been plowed without harvesting, and in many other thousands of acres the late rains completely destroyed what was cut. The yield for the entire state has

been estimated at two or three bushels on the average.

South Dakota will produce about two-thirds of a crop; the northern part of the state will produce very nearly an average yield, while the southern portion of the state, bounded approximately by a line running east and west through Pierre, will be considerably less than an average. In this state, also, late rains have interfered to a considerable extent with harvesting and thrashing, and grain from the most favored localities is now just coming to market.

In Minnesota, Wilton County will probably produce as much on the average as Richland County in North Dakota, the estimate being about ten to fifteen bushels per acre. In this county, also, as well as throughout Minnesota, the quality has been very much damaged by heavy rains.

The cleaning elevators of the Northwest are doing a big business this year, as a great deal of the grain is run through them, either by the commission men or by the shippers before selling. When considered as a whole, the entire yield for the country tributary to the head of the lakes and Minneapolis will not produce more than one-third of an average yield, and about one-fifth of the wheat now coming to the grain centers gets a No. 1 grade.

For the two weeks past the cleaning elevators at Minneapolis and the head of the lakes have been doing a good business, as most of the grain received has been run through them for the purpose of raising the grade given in the inspection yards. During the past few days, however, the consignments to these elevators have considerably fallen off, and for a peculiar reason. With the expectation of turning out a No. 1 Northern grade on wheat that was graded No. 2 Northern and Rejected in the inspection yards, the cleaning elevators have paid a premium over what the original grades would command in the open market. After running through the elevators, reinspection has been asked for, and the inspectors have refused in many cases to raise the grade over the first inspection, much to the disappointment of the cleaning elevators. There has always been more or less complaint for various reasons against the Minnesota inspection, and this new feature has tended to raise a new ground for fault-finding.

The yield of flax throughout the Northwest is large, and a large quantity has already been received at the shipping centers. Even though the inspectors grade a good deal of it "rejected," the flax now received sells at a good figure and is rated of a very good quality.

D. G. DOUBLEDAY.

Superior, Wis., Nov. 10.

DRIED WHEAT.

Mr. Joseph G. King, who operates the grain drying and cleaning elevator at Port Arthur, was in Winnipeg while the Western Standards Board was in session, says the Winnipeg Commercial, and brought along with him several bags of dried wheat, which he had on view along with the samples gathered for the Grain Standards Board meeting. The samples of dried wheat looked clean and good.

"The cost of drying ordinary tough wheat is 1½ cents per bushel. The shrinkage in the weight of the wheat ranges from 4½ to 10 per cent, according to the amount of moisture. Ordinary tough wheat, which is the term used to designate slightly damp grain, will shrink in drying from 4½ to 5 per cent, or equal to about 3 pounds per bushel. Damp and wet grain will show a much greater shrinkage, as stated. Once the grain is dried, it is perfectly safe to hold it in store without fear of heating, and it is thoroughly cleaned while undergoing the drying process."

The bell of the Chicago Board of Trade building tower, weighing 13,000 pounds, has been removed from the building and sold to St. Francis Church, South Chicago. It is, with the exception of the Dearborn station bell, the largest in Chicago, and is six feet in diameter.

HANDLING GRAIN IN AMERICA.

When in 1840 England repealed her corn laws and this repeal was speedily followed by the adjustment abroad of the debt of the state of Illinois incurred in behalf of the Illinois and Michigan Canal, whereby that work was resumed and the canal completed and opened for navigation, agriculture in the Northwest received an impetus which has never since sustained even a serious check. Immigrants came and new lands were annually broken up and seeded to wheat, a program that has continued uninterruptedly to this day. Even in the past thirty years the acreage to corn and wheat has nearly trebled west of the Mississippi and on the Pacific Coast.

Apropos our theme, it may be noted that from

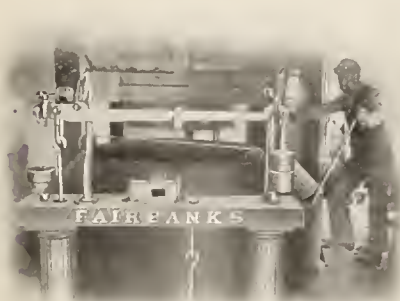
exports began to assume the enormous volumes of later years.

For "what grain will cost when it reaches the ultimate consumer and what it will net the grower depends upon the cost of handling between these two. Its bulk is so great in comparison with its value and the industries incident to its handling are on so vast a scale, that every device which saves time or energy, even a little, assumes the first importance. Man power is too costly even to be thought of nowadays, so, through a thousand mechanisms, simple or elaborate, the cheaper power of steam has been applied everywhere. Steam takes the grain from the cars, stores it in bins, lifts it high in the air and lets it come whirling down through great spouts into the holds of ships."

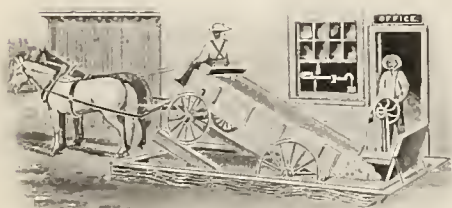
The beginnings of the journey of the grain from

scoop up the grain from the boot and carry it to the head, where it is turned out, by the inversion of the cups, into a spout placed there to receive it. In a little elevator like this one the leg will carry up a thousand bushels an hour. The legs in the great terminal elevators will lift ten times as much, but the principle of operation is exactly the same."

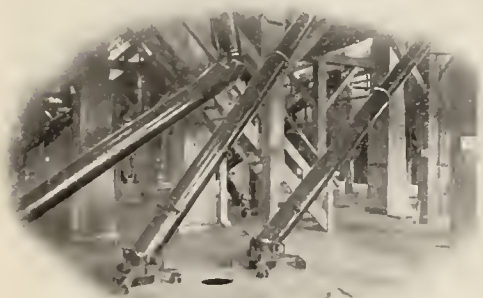
In this receiving house the leg carries the mixture of corn and cob refuse and dirt from the sheller to the separator at the top of the building, where cobs and dust are separated from the grain, which descends through spouts into the bins. The bins (four of them) are ten or twelve feet square and form the greater part of the building. When the cars "are shunted upon the siding, the grain is drawn from the bottom of the bins, lifted



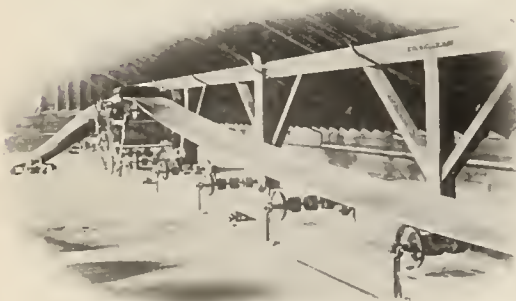
Export Elevator Scale.



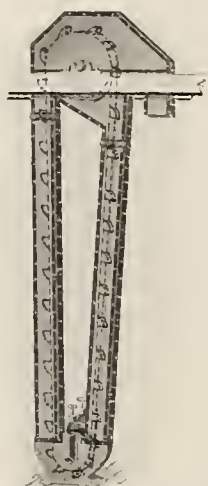
The Dump.



Bin Distributing Spouts.



Marine Gallery Belt With Trigger.



The Leg.



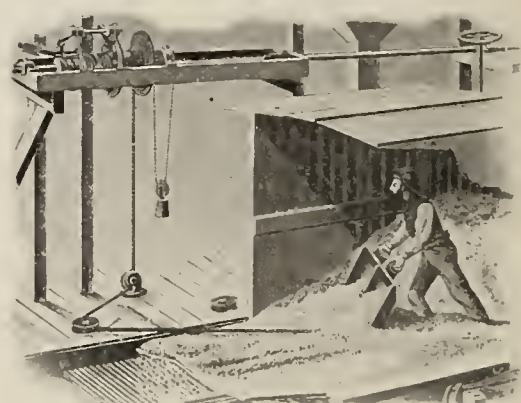
A Country Receiving Elevator.



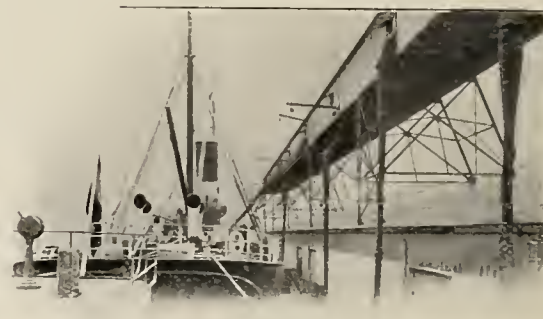
Export Elevator at Buffalo, N. Y.



Grand Trunk Elevator at Portland, Me.



The Power Unloading Shovel.



A Marine Elevator Belt Gallery.



Marine Belt Gallery and Belt.

TYPES OF ELEVATORS AND MACHINERY USED IN THE HANDLING OF GRAIN IN AMERICA.—COURTESY OF JOHN S. METCALF CO.

1800 to 1839 inclusive the exports of domestic wheat from the United States but once (1807) exceeded a million bushels, but thrice (1803, 1807 and 1831) exceeded 400,000 bushels and but eleven times (1801-04, 1807, 1809, 1809-11, 1813, 1818 and 1831) exceeded 100,000 bushels, averaging only 135,168 bushels for the forty years, whereas the average annual export of wheat flour for the same forty years was 912,294 barrels. Beginning with 1840 the exports of both wheat and flour increased very rapidly, those of wheat even more rapidly in proportion to former exports than did those of flour.

The great handicap to the exportation of grain in those days was lack of handling machinery; and for many years the surplus of the Mississippi Valley went in bags to New Orleans for export rather than via Buffalo in order to save one handling; and it was only after the modern system of grain handling machinery began to be evolved from the brains of busy inventors that American grain

the West to the sea are simple enough. The farmer's wagon jolts over the indifferent roads to the railway station, where stands what is called the receiving house, "the primitive grain elevator. It is a tiny affair, considering the ground space it occupies. The typical one will be 20x24 feet, but it runs 45 feet up into the air. Those proportions, by the way, are characteristic of the American elevator; even the greatest of them, to the unaccustomed eye, look thin."

The wagon is weighed, driven up an incline into the building, and halted over the dump. Then the wagon is emptied through a trap in the floor into a sink. The ear corn then goes to a sheller and the shelled grain into the boot of an elevator leg.

The leg in all elevators, large or small, "consists essentially of two pulleys, one in the boot, the other at the head, over which runs a belt, generally of rubber, upon which, at regular intervals, metal cups are attached, and as the pulleys revolve these cups

again to the top of the house, where it is weighed in hoppers and spouted into the cars.

"All this is not intricate. It has been dwelt upon here because these are the essential operations of all grain elevators—up by steam power and down by gravity; into the bins and out of them again; and this whether the building is meant to accommodate five thousand bushels or two millions.

"When our grain-laden freight cars are hauled off the siding again they may be bound for any one of a number of our big interior cities." They at any rate will "fall in with thousands of other cars just like them, and will be jostled and bumped and shunted until at last they roll into a great structure three hundred feet long, covered with corrugated iron, brick or tile, and having its name across the side in white letters that can be read through an intervening half-mile of smoky air."

This is the terminal elevator, with registered title and licensed by the state and the city board

of trade, or both. Grain must be inspected and weighed "before going into its bins, and once there it is as easy to deal in it in the market as it is to transfer money in a bank from one account to another. The warehouse receipt for it is negotiable—to all intents and purposes, is the grain itself.

"In the elevator the cars are not allowed to wait long. They have come into the electrical atmosphere of hurry which pervades the American world of commerce. Time and space are almost priceless, so the seals are broken and the car doors rolled back, and then in a moment the grain first makes its acquaintance with the power shovel.

"The power shovel is a drum affixed to a revolving shaft. A rope is wound upon this drum; and if you take hold of the end of it and walk away, it will unwind easily and as far as you please, so long as you do not stop. The moment you do stop, however, it will wind up again and haul you back to the point you started from. A big iron-shod two-handled scoop is attached to this rope, and with it the shoveler goes into the car. The moment he stops the rope jerks taut and the scoop full of grain is drawn out of the car and dumped into the boot of an elevator leg. A pair of shovelers—they work in pairs—can take out of cars about thirty thousand bushels in a day."

Now the grain goes up the leg again "and is spouted into the bins just as it was before, but with this important variation, that instead of one leg there are sixteen; the cups they carry that were eight inches wide are now twenty inches wide, and the four bins for the spout to fill have grown to more than a hundred." The bin is, "after all, the most distinctive feature of the American method of handling grain. In European warehouses, so generally that the exceptions are inconsiderable, the grain is spread, three feet deep, perhaps, over immense floors; but the American elevator turns to the vertical dimension instead of the horizontal, and the grain is piled sixty feet high in narrower bins. The greatest of them is not likely to be more than sixteen feet square. The sides and the bottom, which instead of being square is tapering so that the bin will drain perfectly, are made of cribbing, planks two inches by four at the top and increasing to two by ten at the bottom, nailed broad sides together."

How long our grain will lie in these bins depends upon circumstances; but we "have predestined that our grain shall cross the sea; so at last, when what is beneath it in the bin is drawn away and other grain is piled above it, its time comes to escape through the open door at the bottom and then be lifted in the now familiar way by the tireless metal cups and to take again the swift plunge down a big spout. The grain that left the bin just ahead of it may have been turned into freight cars and sent off to almost anywhere, but ours is for Buffalo and the spout directs it down, far down, into the hold of a vessel;" and by and by the clumsy steam barge, blunt nosed and broad beamed, with only little water between her keel and the Chicago River bottom, is seized by two dauntless tugs of prodigious lung power, which "screaming angrily to the bridges the peremptory command to turn and make way, contrive, by a miracle of pilotage, to bend her 'round the curves, bump her over the tunnels and tow her out between the breakwaters to the lake, where they cast off and leave her to plod, twelve knots an hour, to Buffalo.

"When we reach this next stopping place in our journey to the sea it needs but a glance at the other vessels, grain laden like ours, waiting their turn alongside the great elevator to which our cargo is consigned, to convince us that here, as in Chicago, a single hour's delay will prove costly. Obviously, too, here is a new problem to solve. The power shovel which made such short work of the freight cars will never do for lifting the grain straight out of our deep hold and through our narrow hatches. Well, we shall see. We are moored close by the elevator, our main hatch exactly opposite a tower-like structure, built right against its side and a single story higher than the rest of the building.

"Inside of this marine tower, as it is called,

hangs, like the clapper of a titanic bell, a huge affair framed of steel and timbers, booted and sheathed with iron, and we have not long to wait here beside the elevator before this monster descends, slowly and with dignity befitting its size, but still in the most matter-of-fact sort of way. A big stick of timber with a roller at the end of it is run out from below and pushes the booted end out away from the side of the elevator until it hangs directly over the opening to our hold. Then down through the hatchways, down, down, down, until the boot is hidden in the grain.

"The problem has been solved, and this time by sheer audacity. For do you recognize this thing that is plunged into our hold? The five thousand bushels of corn that we have accompanied so far recognize it at once. They were lying near the top of the pile and in just twenty minutes the last of them tumbled into the boot and was lifted just as it had been so many times before. For what we have been watching is nothing but an elevator leg hung up bodily in the marine tower; it is ninety feet long, and they can let it down and pull it up nearly fifty feet if necessary. It will lift fifteen thousand bushels an hour out of the hold and into the elevator.

"We have said that before the grain goes to the bins it must be weighed, and here is the manner of the weighing. A receiving bin is placed directly beneath the spout of the head of the marine leg. The bottom of the bin is a slide controlled by a lever. Beneath this bin is a scale with a hopper whose capacity is two hundred bushels. At the bottom of the hopper is a door so that when the grain is weighed it can drop through into another bin. In order to secure a proper economy of time and effort the weigher must adjust his scale beam to a standard weight and take just that amount into the hopper at each draft from the receiving bin. At first the slide is pulled wide open and the weigher stands upon the scale platform beside the hopper. Then as the scale beam rises he bears less and less of his weight on the platform and at the same time gradually closes the slide, reducing the amount of grain that is being admitted from the receiving bin. The instant that all his weight is withdrawn and the scale balances, the slide is shut tight and the door at the bottom of the hopper is unlatched. It swings away, dumping the grain into the bin below and then by its counterweight swings back again and is latched. That is not difficult if you are allowed to do it leisurely; but if you are to weigh all that the great marine leg is pumping out of the hold—fifteen thousand bushels an hour—you must repeat that performance every fifty seconds, which is a different matter.

"This is nearly all of our story. The elevator at Chicago was a warehouse; this at Buffalo is primarily a transfer house. The grain may be stored here but it is more likely that it will, like our particular five thousand bushels from Kansas, be carried across the house and out again as fast as the cars can be found to accommodate it. This is our last way station; we are going now straight to the sea, to one of our grain exporting ports—Portland, Boston, Newport News and New York, though curiously enough, the last named city is far behind the others in its equipment for getting the grain to the ships.

"To understand the mode of operation in a seaport elevator remember our Chicago warehouse. There is but one important variation; that is in the method of putting the grain into the ships. In Chicago the barge lay right against the side of the elevator and the grain went into it through spouts, but your ocean freighter cannot do that. She lies at a pier and the grain is carried out to her on a belt conveyor.

"The belt conveyor is simply our old friend the elevator leg stripped of its metal cups and lying on its side, that is, so that the belt travels parallel to the ground. The other devices that have been described were expedient, but they were noisy, dusty, strenuous; this one is beautiful. Without noise, without apparent effort, the grain tumbles upon the swiftly moving belt and rides out, a yellow ribbon three feet wide on the broader band

of glistening white rubber, stretching out six hundred feet to the ship. You have seen a man make a running dive from a springboard; that is the way our grain ends its journey to the sea. The belt that carries it rises slowly in a gradual incline to an iron frame containing a combination of broad, small diameter pulleys; over them the belt makes a sharp bend and starts back to the elevator. But the yellow ribbon goes on, leaping free like the jet of a fountain, and without spilling a single golden kernel, without ceasing to be a ribbon, it pours silently down the black spout into the ship. We do not wait to see her slip her moorings and steam away over the horizon. Our journey is ended."

[For the illustrations and many facts of this article, as well as for all matter inclosed within quotation marks, the writer is indebted to a pamphlet issued by John S. Metcalf Co., engineers and grain elevator builders, Chicago.—Ed.]

IN THE COURTS

The jury gave a verdict for Smith & Baker of Baltimore, against the N. & W. R. R. Co. The plaintiffs sued for the loss of wheat shipped over the railroad to Locust Point, Md.

W. E. Fildes has sued the Central Grain and Stock Exchange of Chicago for \$375,000. He claims to have lost \$125,000 on a speculative deal. Fildes was formerly the agent of the Exchange at Bloomington, Ill.

Bounds Bros., who sued E. A. Stover and Rogers & Rutherford of Columbus, O., to recover moneys lost in what the plaintiffs claimed was a wager on the future price of grain, were given damages by the jury for the amount claimed and also \$50 exemplary damages on November 4.

J. W. Culver has sued the Open Board of Trade of Chicago, alleging \$25,000 damages. He alleges that he was not only peremptorily told to leave the floor immediately or he would be thrown out, but was also informed that he would not be allowed to return, though the floor is open to the public. Culver asserts that he had built up a business from which he derived an income of approximately \$4,000 annually and that this custom was destroyed because of his trouble with the Board.

Alanson and Charles Alexander have begun an action of trespass against J. Arthur Snell at Providence, R. I. The plaintiffs allege that the defendant told them that if they would advance the money he would purchase hay in his own name, but on their joint account, and would pay them one-half from his profits for the use of the money. They say that they advanced \$2,000, and later some other sums, but that the defendant did not use the money as he represented that he would, and that he applied it to his own use. They sue for \$10,000.

J. B. Oliver of Milwaukee has sued Raymond, Pynchon & Co. for \$3,024.48 alleged by plaintiff to have been lost by him in a wheat deal. He alleges that he bought 65,000 bushels of wheat in Chicago through defendants, which they notified him was stored in a warehouse in Chicago. March 16 they made a demand for more margins, and within an hour, the plaintiff alleges, he complied with the demand. Later he was told the wheat had been sold at a loss of over \$500. The defendants, he charged, retained the sum named for commissions, tax, storage, etc. Plaintiff asserts also that the defendants, as he is informed, and believes, did not buy the wheat as alleged nor store it in Chicago houses, and never earned a commission.

Grain thieves have been keeping the South Chicago police busy. They are mostly boys and young men.

About fifteen bean pickers employed at Sage & Potter's bean elevator at Churchville, N. Y., who were receiving 3 cents per pound for the dirt picked out, struck recently for 4 cents. The firm readily granted the demands and the machines were soon under motion again.

FALL MEETING OF GRAIN DEALERS' UNION.

President Hunter gave his usual warm welcome to the members of the Union at the Grand Hotel, Council Bluffs, Iowa, November 8, at 2:30 p. m. As a preliminary to the business of the meeting he said:

"It is with a great deal of pleasure that I see so many before me to-day, but I would like to see more. We haven't prepared any special program. The principal object of this meeting is to get you to renew your friendship so that you won't forget that you are all brothers. There is very little trouble in the Union, for which we are all thankful. I want you to feel free to talk about the corn crop, acreage, business, etc. Anyone having any grievances is requested to present them to-day."

Secretary Stibbens read a paper, as follows:

Mr. President and Gentlemen:—We congratulate the members of this organization on the good condition of the trade throughout the territory which we cover. There has never been a time in our history that harmony was so nearly perfect as at this time. Past experience of fights and disturbances have certainly been beneficial to you. How long this condition will continue depends solely upon the manner in which you treat your competitor. There probably will never come a time, but occasionally there will be a little friction spring up at some point, and when it does, give us a reasonable time to adjust the trouble before you inaugurate a fight that will spread to a dozen towns and take weeks and probably months to settle. Some of us are so constituted that we cannot accord to our competitors the same rights and privilege we exact of them, and this is usually what causes the trouble among us. The selfish spirit in us is eternally cropping out; and if it was not for this organization we would be fighting each other to-day instead of being assembled here for the purpose of promoting harmony.

Has it ever occurred to you that we were strangers to each other before this Union was organized? Do any of you still realize the condition of the trade five years back? And how does it compare with the present? Would any of you be in favor of dissolving this Union and go back to the old way of fighting it out? How many elevators are for sale to-day compared to five years back? And how about the prices of them? You were told in this same building about a year ago by a man who covers this territory that elevator property had appreciated 33 1-3 per cent on account of the workings of this association. This being true, it's only reasonable to believe that there has been an increase in the profits of your business.

We should congratulate ourselves that we are at peace with our competitors, track buyers, commission firms, and last of all, but not least, at peace with the railroad companies. A condition which should be highly pleasing to all our members. You remember well the time when you would see Mr. Davenport and Mr. Bechtel traveling around over this section trying to patch up the troubles of their shippers; it was almost a daily occurrence to see one of them. How often do you see them to-day, and why the change? Because the interest of the shipper and that of the railroads are identical. The railroads have met us half way, have extended to us the right hand of fellowship and given us to understand they are ready and anxious to promote our interests. They stand ever ready to help us adjust any trouble that may arise and have materially assisted us along this line in the past. We have gained the good will of the railroad people by fair treatment, and they, especially the Burlington Route, appreciate the work that is being done by this Union, and we at all times have their loyal support. Some of you may think I am drawing on my imagination. Not so, I have simply stated facts.

I believe we have overlooked one important matter in the past, and that is a board of arbitration. Quite often when a shipper and a receiver have a difference, they refer it to me for settlement or for an opinion; and I find it impossible to please both parties. Occasionally I have been able to effect a compromise. We should have a board of arbitration composed of three good business men of good business judgment to take up these differences when they occur; and when submitted to them, it should be understood that their decision should be final, and both parties to the arbitration should agree beforehand to abide by the decision of the board. A board of this kind would save an endless amount of trouble and correspondence, and each dealer would understand that when a difference would be submitted in this way they must settle as the board decided. I believe this a fair way to settle all differences and we should all agree to it and abide by it.

A great many of us are liable to be disappointed in the inspection of this crop of corn. If we refuse to take it when not in condition, we will have but little trouble in having it grade No. 3 or better, but if we receive it regardless of weather or condition it will grade No. 4 or under, and you will hear a great howl go up on account of the unjust inspection; and the chances are if you have any No. 4 corn it will be your own fault.

It will be well for us to impress upon the farmers that it is absolutely necessary for them to sort their corn well if they expect to get the highest market price for it, as they will not sort it unless you insist upon it. You will find there will be still plenty of bad corn after they have sorted it, as a great many ears look to be good that are rotten next to the cob. You will find it necessary to throw out a great deal of it after your customers have pretended to sort it. The only safe thing for the dealers to do is to take 75 pounds for a bushel of all ear corn they receive and do it all winter. If you do not you will not get your own.

There is no good reason why we should purchase rotten corn, unless we reduce the price or make it up in pounds by taking 75 pounds for a bushel. This can be done all right if some dealer does not agree to take it at 70 pounds to get the corn away from his competitor; and if this is done, in a short time every dealer will be taking it at 70 pounds. Then you will be compelled to keep it up all winter, and you will have gained nothing in the transaction but a load or two of corn. If there ever was a time when it was important for the dealers to stand together as one man in order to get what belongs to them, that time is now. If we don't do this it will be our own fault.

If farmers prefer to shell their corn they will be particular in sorting it, as it will show up just what it is when shelled, and we will get a better grade of corn when they deliver it shelled. If we work along this line you will find that you will have little occasion for growling about the inspection. If your corn misgrades your profit is gone, and all the growling we can do will not change it. The thing for us to do is to be careful and conservative in buying and handling this crop of corn. You will remember the sad experience of a great many dealers in handling the crop of 1896. The trouble then was a great many bought No. 4 corn and paid a No. 3 price for it; and the consequence was, a 5-cent discount in settlement. Unless we are very careful the experience of 1896 will be repeated; and we are the ones who will suffer.

Do not lose sight of the fact that this organization cannot change the inspection, as that department is controlled by state law or by boards of trade. Of course, you can call for reinspection, but quite often you do not know the result of the first inspection until it's too late to ask for reinspection.

We can congratulate ourselves that we do not live in a state where political parties make war on grain associations for the purpose of making campaign thunder; and we predict that the unjust persecutions of kindred organizations beyond the river sleep the sleep that knows no waking. We tender our sympathy to the officers and members of the associations referred to for the gallant fight they have put up for their moral rights. May they live long and prosper.

The only apology I have to offer for not having an extended program, is that every person I have asked to talk at this meeting refused to do so. I take it that all of you are having so little grief that you could find nothing to talk about; but I have met some of you when you were having trouble, and found that you were quite eloquent. My friends, in order to make these meetings interesting and profitable it is absolutely necessary for some of you to do some talking. You all have ideas as to how the grain business should be conducted, and you should give these meetings the benefit of your views. We cannot afford to fall into a rut, but instead, must adapt ourselves to the changes of business as they occur and work along with the progressive tide of events.

When we hear it reported that our competitor has raised the price on us we should be very slow in meeting the price, as very often these rumors are started for the express purpose of creating a fight in order that some customer may be enabled to get a higher price for his grain. When you have ascertained that such reports are true, do not at once meet the price, but report it to the officers of this Union and give them a chance to settle the matter. By being hasty in these matters we very often precipitate a fight that is very injurious to the trade, and after you have handled a large amount of grain for nothing, what consolation have you? Any fool can buy grain regardless of cost and quality, but it takes a fairly good business man to buy it and get a profit out of it. Every intelligent man who sells grain to a local dealer expects him to make a profit on it; and if we do not get it, we should not blame other people. When dealers are working in harmony and paying the same prices for grain, you hear no grumbling from your customers; but when a fight breaks out and dealers at one station are paying more than other dealers, then you hear a cry go up, and they at once ask you why it is that you cannot pay as much as others; and all the argument you can produce will not convince them that you are paying all you can afford to.

We have a few dealers in our territory, and only a few, who absolutely refuse to support this organization; and the reason they give for not doing so is that it is of no benefit to them. It seems that this class of dealers are not disposed to better their condition when they have an opportunity, but they receive the same benefits as those who are members, and they let the members hear all the expense of keeping up the organization. It does not look reasonable that grain dealers in this age would withhold their support from grain organizations for the paltry sum of \$12 per year, but such is the case.

Our future success depends largely upon the kind of support our members give us, and the fair treatment you give your competitors. If you grant to your competitors the same rights that you exact from them you will have but little trouble; but, on the other hand, if you expect better treatment from your competitors than you accord them, you will not have a harmonious trade. It seems to me, after all the trouble we have had in the past few years, that each dealer would know exactly what he has to do in order to avoid trouble with his competitor. Before raising the price, think well what effect it will have on other stations; for you not only demoralize your own trade, but the trade of a dozen other stations. If we continue our present harmonious relations with each other for the next six months, it will mean an increased bank account; but if we allow our selfishness to overcome our good judgment, it means a decreased bank account. Which will you choose?

I believe a great many of us have learned that grain fights are expensive for those who participate in them; and I believe dealers in general will avoid doing anything that will bring about confusion in the future. Necessity caused the organization of grain associations and a great many have sprung up in the past few years, which receive consideration and respect throughout the business world on account of being honorably conducted. Then let us see to it that we take no

backward step in this matter, but move onward and upward until we will have achieved a state of perfection unequalled in the annals of history.

A general discussion followed the reading of the paper on the weight of corn per bushel that should be accepted, amount of feeding and yield per acre.

J. R. Graham, Hastings: I think that it would be well to take seventy pounds instead of seventy-five pounds per bushel weight of corn from farmers. Some of the corn is now dry enough for seventy pounds. If we take seventy-five pounds, there will be more or less carelessness in handling it, and I think it would be more satisfactory to the farmer.

C. M. Boynton, Creston: I thought that up to November eighty pounds was about right, for November seventy-five pounds, and after that seventy pounds.

E. Reichart, Farragut: Last Tuesday I shelled a load of corn and it fell short 10 per cent. This was white corn. So far as weight is concerned my idea would be to allow the farmer seventy pounds and cut the price a little. It is customary to take only seventy pounds after the first of November. This fall there will be a big waste in handling corn. I have a good strong cleaner and I throw out a good deal of poor corn. We are taking seventy pounds. There is about fifty bushels per acre around Farragut and Shenandoah. In our territory there is considerably less feeding than usual.

Major Rickey, Griswold: The only argument I see for keeping the weight up is to keep the feeders out. In our territory we take seventy pounds. There is only about half the feeding as ordinarily. We handle mostly shelled corn. The yield is not so good with us as in some places. Price ought to be made to induce the farmers to throw out their poor corn.

Mr. Pearson, Orient: I have received about 60,000 bushels ear corn. I find a good deal of corn with white mold. We are taking seventy-five pounds. If the corn gets dry and the farmers take out the bad corn, we will take seventy pounds.

G. A. Willett, Osceola: I think it would be better to cut the price than to try to raise the weight after it has been established. We take seventy pounds. About seventy-five per cent of feeding is done as compared with last year and our yield is about forty-five bushels per acre.

M. F. Hackett, Fairfax, Mo.: Our corn will grade No. 3 if the rotten corn is thrown out. It is in poor condition in some localities. The butt end of a good many ears is rotten and sprouted. The yield will average forty-five bushels. As to weight, I do not believe that we can hold it at seventy-five pounds, as the farmers are used to seventy. It is hard to persuade them that it should be different this year from other years. I think it would be best to establish the weight at seventy pounds and make the difference in the price. Feeding is seventy-five per cent compared with last year.

Mr. Willett: We sort our corn and farmers seem to be satisfied with our doing so.

W. W. Powell, St. Louis: New corn began to arrive in our market about four weeks ago, grading No. 4, No. 3 and No. 2. The best corn comes from Illinois.

Mr. Sheldon, Percival: In our vicinity I find that some of the corn is damaged. A bad storm recently blew much corn from the stalk. We have been taking seventy pounds to the bushel since November 1. Feeding is not very heavy in our vicinity, although there is more stock than last year. I can never get farmers to pick out their rotten corn. We sort it out when we shell it. My opinion is that it would be better to cut the price than to raise the weight. Our yield is about forty bushels per acre.

T. A. Kyle, Shenandoah: We are still taking seventy-five pounds per bushel, and shall do so for a while. We have much damaged corn and have had considerable trouble with old corn in grading. My idea is to give the man with good corn the benefit of it as regards price. About seventy-five per cent of feeding, as compared with last year, and the yield is about forty to forty-five bushels per acre.

I. T. Spangler, Atlantic: I do not think we have had any new corn as feeders are taking it. Corn is considerably damaged. It is my opinion that the

price can be regulated easier than the weight raised. Our average per acre is thirty-five to forty bushels.

W. W. Powell: For several years St. Louis has advocated a steel barge line from St. Louis to New Orleans. We now have such a line and the first trip was made last week. We think an avenue will now be opened to our market and to all shippers that use our market.

D. N. Dumlup, Fontanelle: The quality of our corn is rather poor this year. Feeding is not half as much as last year. The yield is about thirty-five to forty bushels per acre.

G. L. Graham, St. Louis: I wish to impress upon the dealers the importance of sorting out their corn and keeping the grade as high as possible.

President Hunter: The discussion has brought out the fact that corn is largely damaged this year, so I would urge on each one of you the importance of keeping up your margins.

Secretary Stibbens: I have had some new corn on the market that has not graded below No. 3. I fear that the idea will go out from this meeting that we have very poor corn. It is a mistaken idea. I think seventy-five pounds is about right in the question of weight of corn.

J. W. Chambers, Omaha: I want to say that corn in Southwestern Iowa is as good as in Nebraska. In other parts of Iowa it is not so good as in the Southwest. In Southwestern Iowa you must take care of it and it will come out all right. We take seventy-two to seventy-seven pounds per bushel.

G. A. Stibbens: Corn that I have shipped has graded variously. Some of it has done very well. We should, however, watch closely against damaged corn.

C. M. Boynton: I think this discussion has been of much value to us in that it will make us conservative in handling the corn. It all depends on the dealers whether they make any money or not. If they handle it properly they will find their margins all right.

W. F. Shindley, Lewis, spoke briefly on unfavorable conditions at his station. Mr. Reichert made a motion that the chair appoint a committee of three as an arbitration committee which should adjust differences that might arise, but he withdrew the motion on being advised that such committee would clash with the duties of the governing board.

The meeting then adjourned.

"UNION" NOTES.

Only one grievance reported at the meeting.

The "American Elevator and Grain Trade" was represented by John E. Bacon.

One railroad man present—J. M. Bechtel, division freight agent, Burlington Road, Burlington, Iowa.

Everyone thought that C. M. Boynton's box of cigars was in the "short" line, but the box showed up with its usual good margin.

A. H. Bewsher, secretary of the Nebraska Grain Dealers' Association, left that state long enough to come over and congratulate the Union on its excellent showing.

Secretary Stibbens wants all the voluble and ready witted orators whom he meets in the home offices to bring some of their spell-binding delivery to the business sessions.

J. Auracher, Shenandoah, has an advertising novelty in the shape of a lead pencil, which he places where they will do the most good. The pencil is stamped: "J. Auracher, Grain Dealer. Figure with me."

The following dealers came: G. A. Willett, Osceola; G. A. Stibbens, Coburg; M. F. Hackett, Fairfax, Mo.; D. M. Hunter, Hamburg; J. R. Graham, Hastings; C. Hunter, Hamburg; J. A. De Cou, Woodbine; I. T. Spangler, Walnut; L. T. Spangler, Atlantic; William McMahon, Shenandoah; G. H. Currier and H. G. Abraham, Prescott; J. R. Harris, Northboro; G. W. Wyant and S. B. Barnes, Malvern; E. Reichart, Farragut; W. Maines, Silver City; John Lafferty, Neola; J. S. Campbell, Carson; W. G. Sherman, Riverton; T. A. Kyle, Shenandoah; J. F. Kyle, Coin; J. Auracher, Shenandoah; F. M. Campbell, Randolph; J. W. Shambaugh, Clarinda; H. A. Van Schoiack, Elliott; W. F. Shindley, Lewis;

J. H. Gwynn, Yorktown; D. N. Dumlup, Fontanelle; J. T. Johnson, Rockport, Mo.; J. B. Samuels, Riverton; Major Riekey, Griswold.

The commission men included, with firms represented: Capt. M. T. Russell, Des Moines, Iowa; Bartlett, Frazier & Co., Chicago; Charles M. Boynton, Creston, J. F. Harris, Chicago; Joseph Norton, P. P. Williams Grain Co., St. Louis; G. L. Graham, G. L. Graham & Co., St. Louis; W. W. Powell, Connor Bros. & Co., St. Louis; P. J. Barron, John Mullally Commission Co., St. Louis; J. W. Chambers, Omaha, Peavey Grain Co., Chicago; Floyd J. Campbell, Floyd J. Campbell Co., Omaha; F. P. Lint, Greenleaf-Baker Grain Co., Atchison, Kan.; E. Picker, Picker & Beardsley, St. Louis; Isaac Motter, W. L. Green Commission Co., St. Louis.

Court Decisions

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Liability for Breach of Correspondence Contract for Sale of Wheat.

The Colorado statute of frauds, as it is called, like that of many of the other states, requires that every contract for the sale of chattels for the price of \$50 or more, if no part of the goods is accepted and received by the buyer, and no part of the purchase money is paid by him, shall be evidenced by a note or memorandum in writing subscribed by the parties to be charged. But the Court of Appeals of Colorado says it is not necessary that the terms of the agreement shall all be contained on one piece of paper. The memorandum may consist of several writings; and so the contract which the parties have made may be gathered from letters which have passed in correspondence between them. Consequently, it holds, in the case of the Crystal Palace Flouring Mills Company against Butterfield, 61 Pacific Reporter, 479, that the demands of the statute were met and there was a complete contract where the letters and telegrams between the parties showed that the one agreed to sell and the other to accept a definite number of bushels of a certain kind of wheat at a certain price to be delivered at a certain place within a certain time.

Nor to maintain an action for breach of contract against the seller does the court consider that the buyer must first tender the purchase price of grain where the contract made it the seller's duty to ship the wheat, and, having done so, provided for his drawing on the buyer for the amount due. Such a contract, the court holds, gives the seller no right to demand payment in advance. Hence, no tender is necessary to fix his liability for failure to ship wheat so contracted.

The measure of damages for a failure on the seller's part to ship wheat which he has contracted to deliver at a certain price at destination, the court further holds, is the excess in value of the wheat where it was to have been delivered, and at the time it should have been delivered, over the price agreed to be paid for it.

Validity of Ordinance Requiring Weighing on City Scales.

The validity of a city ordinance relative to the weighing of coal, hay and grain was the question before the Supreme Court of Missouri, Div. No. 1, in the case of the City of St. Charles against Elsner (56 Southwestern Reporter, 291), which was an action for the violation of such an ordinance. Cities of the third class, in Missouri, to which this one belonged, are authorized by statute to provide by ordinance for the inspection, weighing and measuring of coal, hay, corn and other commodities and to fix the fees therefor, and also to collect a license tax on "merchants of all kinds," and on "all other businesses, trades and avocations whatever."

The city had and maintained three public scales, and the ordinance, after providing for the appointment of weighers at such scales and their qualification, provided among other things that no person should buy or sell or offer to sell any unshelled

corn or stone coal in that city in quantities exceeding fifteen bushels, nor should any person buy or sell or offer for sale any hay in that city in quantities exceeding 500 pounds, until the same should have been weighed by one of the city weighers on one of the city scales and a certificate of the weight given as prescribed. It fixed the weighers' charges, in part as follows: For every load of unshelled corn or stone coal containing fifty bushels or more, twenty-five cents; for every such load containing less than fifty bushels and more than fifteen bushels, twenty cents; for every load of hay containing more than 500 pounds, twenty-five cents, and for all other things not mentioned, twenty-five cents per load.

The first contention in the case was that the city under the statute had no power to maintain public scales. But the court holds that the power to make provision for the weighing of coal, for example, necessarily implied the power to provide the means for weighing it, and scales were the appropriate means for that purpose.

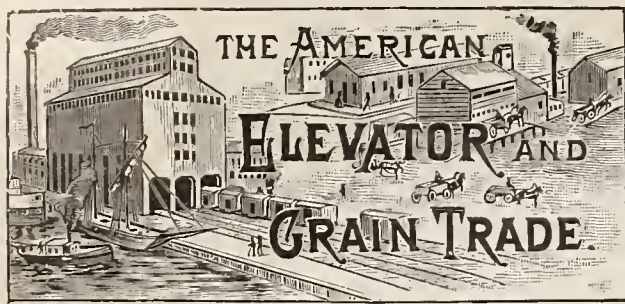
Then it was argued that, conceding the power of the city to provide for the weighing, say, of coal, on the public scales, it had no power to tax that weighing for revenue purposes; that the ordinance in effect was a revenue ordinance and hence invalid. Yet again the court holds in favor of the validity of the ordinance. That the city had the power to regulate the business of a dealer in coal by requiring his coal to be weighed on the public scales and by imposing a charge for his weighing, was, it says, the plain meaning of the statute, and there was nothing in its terms requiring it to limit that charge to the actual expense of maintaining the scales.

In the next place, it was urged that the ordinance was invalid because of the discrimination whereby only coal sold in a quantity exceeding fifteen bushels was required to be weighed on the city scales. But the answer of the court to that is that the ordinance made no discrimination between persons of the same class. All persons selling coal in the city in quantities exceeding fifteen bushels must have the same weighed on the public scales, and no person was permitted to buy coal in such quantity that had not been so weighed. The fact that a merchant having a permanent stand at which he was licensed to sell that and other commodities, after having bought coal thus weighed, was not required, when retailing it to his customers in quantities less than fifteen bushels, to weigh it on the public scales, the court holds, created no discrimination between those who sold in quantities exceeding fifteen bushels and from whom he may have bought it; nor did the ordinance make any discrimination against the merchants who thus sold it. In other words, it holds that it treated all persons of each class alike under the same circumstances, and that the classification was a natural, reasonable and obvious one.

Last of all, it was insisted that the ordinance was unreasonable, and for that reason should be declared invalid. But the court can find nothing in the ordinance to condemn it on that ground.

Thus does the court uphold the validity of the ordinance, although attacked on various grounds and pronounced invalid in the lower court. That the test case was over a sale of a load of coal containing more than fifteen bushels, and not weighed on the city scales rather than over a violation of the ordinance with respect to a sale of hay or corn, it would seem could make no difference. All of the principles involved would be the same.

The cottouseed oil mill men of South Carolina have organized an association. The mill men, who are now crushing 220,000 tons of seed annually, have buyers on the road getting seed at stations all over the state. In many instances mills have been forced to buy seed a hundred miles away and from the territory of other mills. Freight charges and prices have gone up. The result of the conference is that the mills will all buy on a uniform basis, getting the use of established warehouses and scales, and territory adjacent to the mills will not be invaded by buyers from more distant mills.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., NOVEMBER 15, 1900.

Official Paper of the Illinois Grain Dealers' Association.

THE ILLINOIS WAREHOUSE LAW.

The management of the Illinois Grain Dealers' Association has announced that the Association will ask the Illinois Legislature at the January session to repeal that portion of the Illinois warehouse law which enables the operators of public warehouses to carry on private business in grain in those houses. The equity of the repeal no one will question. While it might not wholly restore old-time conditions in the grain trade, it could in no way work injury to any individual or to any legitimate private business in grain, however much it might interfere with special privileges; but it would restore the equilibrium of equities and give to others than a mere baker's dozen of men in Chicago some sort of a chance at least to do a cash business in grain, which they do not now have on equal terms with the operators of public elevators, for obvious reasons.

The repeal will probably not, however, be so easy of accomplishment, as the justice of it would seem to warrant. Large portions of the state have next to no representatives in the Illinois Grain Dealers' Association, while the northern part of the state, especially, is grid-ironed by roads dominated by the track-buying interests. Not all track buyers operate public elevators, but all operators of public elevators are track buyers, and they have their friends in this most populous portion of the state, where the question of the repeal has been practically ignored by the local press and is, even among grain dealers, certainly among those who habitually sell on track, largely a matter of indifference. Many able apologists of the law

as it now stands come from this part of the state, even outside of Chicago, and the territory thus presents a peculiar need of a vigorous educational campaign between now and New Year's.

JUDGE VAIL'S QUEER VIEWS.

The extraordinary decision of Judge Vail, noted elsewhere in this issue, met with a storm of protest from Board of Trade men. This is not surprising in view of the fact that the jurist went out of his way to remark that he did not distinguish any difference in their methods of doing business between the Chicago Board of Trade and the Central Stock and Grain Exchange, which is the office name of the old Murphy bucket-shop. Possibly the case was not made as clear for the vision of the judge as it might be, but it is inconceivable how anyone of sufficient caliber to reach the bench can fail to discriminate between the reality and its counterfeit, as Judge Vail confesses himself unable to do.

Nevertheless, the decision itself does not turn on the judge's failure to appreciate the real character of the Chicago Board of Trade. He acknowledged the value of its quotations, and, in fact, made their value the starting point of his decision, making perpetual the injunction against cutting them off from the Central Stock and Grain Exchange. Neither did his view that the bucket-shop was as legitimate in character as the Board have any bearing on the decision itself. Briefly, he considered the quotations of such value and affected with such public interest that they must be furnished to all on the same terms; that neither the Board nor the telegraph company can decide whether they are used for unlawful purposes, but the decision of that matter must be left to the Criminal Court.

But this is bad enough. If this view is sustained by the Supreme Court it will complicate the fight against the bucket-shops to an extent that would be appalling. But it will not be. The Supreme Court will certainly acknowledge sufficient property rights in the quotations to allow discretion to the Board as to who shall receive them, and place the onus on the bucket-shop of proving itself legitimate, rather than on the Board of proving in each individual case that the recipient does actually pervert the quotations and use them for unlawful purposes.

DEMURRAGE RULING.

The force of the ruling of the Interstate Commerce Commission in the case of the Pennsylvania Millers' Association against the P. & R. Railroad, made late in October, will depend entirely upon the respect the railways have for the Commission.

In brief, the Commission says that forty-eight hours is an unreasonably short allowance of time for unloading cars where any portion of such time has to be consumed in attending to the preliminaries necessarily antecedent to the actual process of unloading, although entirely reasonable when none of the time is so consumed.

This ruling applies more particularly to inland points of Pennsylvania, for in Philadelphia the "free time" allowed by the Association

is ninety-six instead of forty-eight hours—thus disclosing, incidentally, one of the many possible ways for railways to discriminate against localities in rates. The principle is a correct one, and the justice of the decision will be apparent when the wanton carelessness of railway clerks is considered, who usually take their own time to mail arrival notices that should be conveyed more expeditiously. However the roads may conform to the letter or spirit of the ruling, it will at least serve as a colorable defense for shippers who may be imposed upon.

THE CARLOAD AGAIN.

The New York Produce Exchange on October 19 forwarded to the other exchanges of the country copies of its committee's revision of its rules, the object being to unite the exchanges on a universal rule defining a standard "carload." Such a standard ought to be legalized by the exchanges. A better way, of course, in view of the varying capacities of cars, would be to trade in bushels, but the East has fallen into the carload habit and it seems impossible to break it up.

The only practicable remedy, then, for the inconvenience of present practice, seems to be by united action to make a standard. As a rule the official exchange carload capacity is being steadily increased in size, except at Philadelphia, whose exchange still insists on a small capacity, even at a time when, here in Chicago at least, the track entrances of no less than four elevators are now being remodeled and enlarged in order to admit the new jumbo cars which have become so numerous that the old elevators are obliged to recognize and bow to the inevitable—the big car. Not a few lawsuits and much friction would be done away with in the trade by the legalization of a standard carload.

INSPECTION IN THE NORTHWEST.

Flax seed inspection at the northwestern terminals has been more or less in a tangle since new seed began coming. The seed is tough, unmistakably. It has been coming so bad that the Duluth Record of October 27 said that "if an exact 87½ per cent of pure, sound seed had been exacted for the No. 1 Northwestern it would have been absolutely impossible to have filled the September and October contracts open in September," when it was proposed to change the inspection rules to conform to those in effect at Chicago.

But the Northwest has only two grades of flax seed—No. 1 Northwestern and Rejected. Of course, every shipper's seed is No. 1 Northwestern, and as the market for rejected, though a good one when there is one, has been as erratic as a woman's whims, the commission man's life has not been a happy one.

Numerous complaints of inspection come from Minnesota, but as the inspection department was a part of the gubernatorial campaign issue in that state, but little attention need be paid to them, being largely froth, of course. But when, as a Minneapolis paper says, bona fide, that a certain car of flax inspected No. 1 Northern with 12 per cent of dirt on reinspection went rejected with the

same percentage of dirt and on appeal went rejected with 19 per cent of dirt, and was finally sold to the mill men with 16 per cent of dirt, it would seem as if a better method of inspection might be devised.

The Duluth Record, therefore, proposes that the Chicago rules be adopted to take effect on January 1, which would provide for three grades. This is clearly more near to what the trade up there needs than what it now has, and the adoption of the Chicago rules by Minnesota would be both wise and also another step toward the universal adoption of the scientific and standard method of inspection which has been so happily operated in the flax seed inspection office of Chicago, where it was invented.

NEW BARGE LINE TO THE GULF

St. Louis grain men talked "barge" for a long time but did nothing. Finally Capt. MacDougall of Duluth has showed the river sailors how it might be done by building an experimental barge team of propeller and whaleback consorts, which are now on their maiden trip down the Mississippi, grain laden, for New Orleans.

Capt. MacDougall's experiment has put the entire river population on the qui vive, which is watching for the net return of the round trip with uncommon concern. The whaleback has done much for cheap rates on the lakes. Before this month is ended this plebeian lake craft, so lacking in esthetic features that it is more often identified by number than by name, may have played havoc with all the conservative traditions of the river boatmen and launched, in spite of their warnings, a new era for the grain trade of both the Mississippi and Illinois rivers, now that the latter is afloat again since its accessions of Chicago sewage.

The waterways are the natural highways of the land. But the boatmen have not kept pace with the railroad men in the art of reducing rates and hustling for business. The Illinois Central, paralleling the Mississippi, now dictates rates, whereas the river should in nature do so.

SPRINKLER SYSTEMS IN CHICAGO.

The communication in another column in reference to the systematic ignoring of the presence of sprinkler systems in case of fire in Chicago buildings by Chief Swenie, is, at this moment, a trifle obsolete, seeing that while fighting the latest fire at the mill of the American Cereal Company, at Clark and Sixteenth streets, Chicago, the department so far reversed its practice as to attach hose to the system. The act was fully justified by the results, for the system responded promptly and worked to perfection in all respects.

The announcement that this connection had been made, and with so satisfactory results, was received with general and quite vociferous satisfaction by the insurance men of Chicago; in fact, the event was regarded as of so much significance it is not impossible a call may yet issue for a convention of Chicago underwriters to wait on the chief in person and present him with appropriate engrossments commemorative of his unusual performance, the more

notable in that previously all efforts to impress upon the department the merits of the sprinkler were distinguished failures.

It appears from a list of fires, prepared by the underwriters, that of over forty fires in equipped risks in only three instances was there any connection made with the sprinkler systems. In about twenty instances the sprinklers extinguished the fires before the department arrived, but in the other cases no connections whatever were made with the systems.

This new departure of the department may be evidence that it means to act in unison with the recommendations of the underwriters and to obey the chief's hitherto impotent order of 1898 to battalion chiefs to attach the second lead of hose from the first engine arrived at fires to the system in equipped risks. It is the more important to the elevator interests, because there are sprinkler systems in four city elevators, to wit, Armour's Elevator B Annex, the Belt Line Elevator, Peavey's "A" and "B" houses and the South Chicago Elevator Co.'s "C" annex.

CASE FOR A PHILADELPHIA LAWYER.

A curious situation developed out of the burning of the Dakota Elevator at Buffalo last August. In addition to the insurance on the building and contents, there was \$60,000, more or less, on "use and occupancy," to reimburse the owners for the loss of business during the time it would take to rebuild. This has been figured at 259 days at \$232 per day, amounting in all to something over \$60,000.

This is legitimate enough, of course. Insurance is indemnity, and the loss of business is just as tangible a quantity, measured in dollars and cents, as a building; often more so. But in adjusting the loss it was discovered that the contract of the Dakota Elevator with the Western Elevating Association, which is the name by which the Buffalo pool is known, provided that in case of fire the Dakota should receive its pro rata share of the profits of the pool's business, just the same as if it were in operation. Accordingly, say the insurance men, there can be no possible loss of use and occupancy. The Dakota people get just as much as if the building were in existence and handling grain every day, and no indemnity is possible, because no loss has accrued except on building and contents.

The insurance men have declared their determination to fight the matter out on that line. One company paid, but the others have declined to pay and a fight in or out of court would seem inevitable. The companies would seem to have a good case on the face of the contention were it not for one little circumstance. The Western Elevating Association is not a corporation. It is simply, in railway parlance, "a gentlemen's agreement." Possibly it might deny, under some circumstances, that it was even an agreement. In Illinois a friendly understanding of that sort would be construed as coming under the anti-trust law. But the fact that the Western Elevating Association has practically no legal existence and the Dakota would be left without recourse in case the pool should suddenly cease, as it may,

weakens the case of the insurance companies. But it makes a pretty situation for those who like that sort of a thing.

THE STAMP DUTIES.

The Committee on Ways and Means is to meet at Washington in a few days to lay out a program for the reduction of war taxes. It has been conceded for some months that as the necessities of government were no longer pressing, some diminution of the special stamp taxes would be in order. The party in power is pledged to this in its national platform, and the Ways and Means Committee, at its meeting, will take steps to put the pledge into effect.

Of course, several interests will insist that their special stamp taxes should be the first to go. The amount raised from the stamp duties for the last fiscal year was \$41,000,000. Perhaps all of this will not be surrendered by the government, but those taxes which are the most vexatious should certainly be repealed first. Among these are duties on grain checks, telegrams, bills of lading, contracts and all documents and transactions relating to the handling and transfer of all agricultural products. Grain is already handled on an infinitesimal margin. It should be free entirely from the annoyance and expense of stamp duties.

INSURANCE MATTERS.

The insurance companies are not letting anything get by them. The adoption of the new terminal elevator schedule has abolished grain differentials. It has been the practice to make a lower rate, 25 cents under the annual rate, for grain written for eight months or less. No special rule authorized the differential, but it gradually became universal. Hereafter all grain policies written or canceled for short periods will be at regular short rates of the annual rates on grain.

Another little item, which, while not raising the price of insurance, limits the protection of the policy-holder, is the proposed elimination of the lightning clause. It is averred that the lightning clause was originally intended only to apply to dwellings, but has now been written indiscriminately, and accordingly the Union members are voting on a proposition to make mandatory a rule that the lightning clause shall not be incorporated in policies covering stocks of merchandise or grain in elevators or warehouses. The milk in the cocoanut is the danger of water damage to grain in an elevator struck by lightning during a storm.

In the Northwest insurance men are agitated over the large number of fires in country elevators. In one case the fire has been traced to what was evidently a purpose to hide a shortage in the accounts of the agent, and the insurance people are wondering whether such fires may not be of more common occurrence than they have thought. Perhaps the suspicion is natural under the stimulus of a couple of authenticated cases. We would suggest that possibly a wise precaution for the insurance people to take would be to inquire, before placing the insurance, as to what relations the agent holds with his principal. Some houses are operated under conditions which make shortages inevitable. There is certainly some moral hazard in insuring such property.

EDITORIAL MENTION

Don't forget that there is plenty of rotten corn in other states than Iowa.

The war in the Philippines is "not doing a thing" to oats and hay in Nebraska and the far West.

Northwestern flax seed is "tough" this fall, but none of it seems to be tough enough to get turned down very hard.

Trade principles are facts approved by experience. It is sometimes hard to make a selfish man believe this—until he has had the experience.

There are some pointed letters in the department of "Communicated" on the question of storing grain. Read them, and if the shoe fits put it on.

There never was a better year to make money with cleaning and conditioning machinery than this. Are you ready to "shake the plum tree?"

Commission men seem to be having plenty of "squeeler" music just now. Some customers call it speculation when the investment wins, but gambling when it loses.

The Grain Dealers' National Association will meet in annual session at Indianapolis on the 20th and 21st inst. The program promises lots of papers, at least, and the meeting will be worth attending.

Many of the line companies in the Northwest refuse to buy wet wheat at any price. Some moderate-sized scientific grain driers in interior towns near the grain could coin good dollars up there this winter.

The Southern Industrial Association will meet at New Orleans in fourth annual session on December 4. The business of most importance to the general public likely to be taken up is the Nicaragua Canal question.

The jury having decided that Lloyd J. Smith was "not guilty," the question is, Who is anybody? If it is possible to find the beneficiaries of the "chance to swing ourselves," why not search them and give Smith a rest?

The grain dealers and millers of Kansas met in joint session at Wichita on the 14th inst. The proceedings of this very important meeting, which was largely under the direction of E. J. Smiley, will appear in the December number of the "American Elevator and Grain Trade."

In the coming struggle for tax reduction the fight will be between the grain men to wipe out the taxes on transactions and the brewers to reduce the beer tax from \$2 to \$1 per barrel. Write to your member of Congress and tell him which form of reduction you prefer, and write in such a way that he

won't make any mistake about it. He'll hear from the brewers all right.

So far as the grain interests are concerned, Galveston seems to have entirely recovered from the great storm, for the handling of grain is now going on there as usual and without interruption. The energy and enterprise exhibited by the island city since her disaster are assurance of a splendid future for the rehabilitated city.

The experiment of shelling corn from the shock in the wheat separator cannot be said to be encouraging to the continuance of the practice, even at 8 cents per shock. While the cobs are broken up and the fodder is well cut up by the process, the corn itself is not left in as good condition as by the sheller, many grains being cracked and broken.

A movement is on foot at New Orleans to make cotton seed an open market commodity like grain. The value of the product is about \$75,000,000 annually, but the price per ton is subject to great fluctuations, even on the same day, as is frequently the case when no public market exists. The matter is now under consideration by the New Orleans Board of Trade.

Some of the readers of the "American Elevator and Grain Trade" may be ignorant of and yet interested in the fact that the twenty-eighth annual meeting of the Central Illinois Horticultural Society will be held at the Auditorium, Canton, Fulton County, on November 20-21. A very interesting program has been prepared. J. C. Blair, Urbana, is secretary, and will supply information.

A petition has been circulated on the Chicago Board asking the directors to submit a rule to a vote of the members, providing that warehouses declared regular by the Board shall not be used by their proprietors or managers for storing any grain or flax seed which has been cleaned or mixed in any elevator or warehouse in which such proprietors or managers are directly or indirectly interested.

That hay is subject to spontaneous combustion when housed in bad condition cannot longer be doubted. The secret is to be found in the fact that the moisture causes fermentation, which, as officials of the weather bureau have ascertained, may raise the temperature as high as to 374 degrees F., at which point clover hay will ignite. The remedy is to be found in complete and rapid ventilation, by which the oxidization and ferments can be kept at a temperature below that of ignition.

A sifting of accounts of the farmers' elevators at Chokio, Minn., and at James, S. D., discloses losses through the managers, in the first instance, of about \$9,000, and, in the second, of about \$3,200, which the companies have made good by assessments on shareholders. These are not encouraging to the co-operators, but the James people paid up promptly and have reopened their house. The acting manager accounts for the enthusiasm under the depressing circumstances by claiming that the day following the closing of the house the line elevators reduced their bids on

grain fully three cents per bushel on all grades. This cut apparently was unfair, and farmers cannot be blamed for resisting that kind of treatment.

The posting of the memberships of Ebenezer Buckingham and of Chas. W. Wheeler on the Chicago Board of Trade for transfer was like an archeological find reviving ancient history. Mr. Buckingham originated the Illinois Central elevator system, while Mr. Wheeler was with the old Munger-Wheeler elevators until 1891. Both men were great men of the trade in their time; but how few of the younger generation knew them even by name!

The joint policy for marine grain insurance has crowded out the old method of doing business. A separate policy for each company interested is no longer made out, but a joint policy is issued, either by the Regular Lake Companies combination, the United States Lloyds combination or the British and Foreign Companies combination. This policy is issued on a percentage basis, each company taking so much, and the one good feature is that all possibility of trouble in case of loss from the policies not being identical in terms, is avoided.

While the practice of furnishing grain doors for cars varies in different parts of the country, some roads furnishing the doors and others requiring the shippers to furnish them, nevertheless the railroad freight agents themselves recognize the fact that the roads are obliged to furnish the doors when the shippers insist on their doing so. And, of course, this means, also, that the roads are bounden to furnish doors in good condition. Shippers who are now furnishing doors in addition to loading their own cars are simply being imposed upon.

The hunch in rates made by the Buffalo-Tidewater railway pool, in effect November 1, has stirred up the grain men of the New York Produce Exchange, the management of which on October 15 set aside \$5,000 as a special fund to be expended in furthering the project of an enlarged Erie Canal. The committee favors a barge canal. This action seems rather subsequent, considering the black eye Gov. Roosevelt's glittering but quite unfortunate recommendation for a \$62,000,000 ship canal received not long ago from the voters, but as the old Erie ditch is not yet wholly dried up there may be still a fighting chance for doing something sensible for it after all, by making it a big barge instead of a big ship canal.

The "American Elevator and Grain Trade" would join with other innumerable friends of the venerable Dennison Smith, secretary of the Toledo Board of Trade, in congratulations and felicitations on the completion of the 83d year of his life in October last. Mr. Smith is one of those delightful men who may count their years by scores, but who never grow old, because they never permit themselves to see in this world aught but beauty and friendship. These keep the heart young and the spirit undaunted at all ages. The past for them brings no vain regret, but its sweetness fills them still with the hope, as Mr. Smith expresses

himself, that "I may improve my vanishing and remaining days in usefulness and good deeds to my fellows within the compass of my ability."

The proceedings of the Grain Dealers' Union, as reported in another column, including Secretary Stibbens' address, are particularly valuable reading just at this time. The special problem of the hour is with reference to corn, and it is well discussed. As unfortunately the conditions in Southwestern Iowa are not unique, but apply generally to the corn belt, the discussion has a general significance.

Overloaded grain elevators continue to collapse, and while the wrecks are not always the handiwork of the barn architect, they are in nearly all cases imperfectly built houses. It is a trite remark, but it goes, that a careful man will employ an elevator architect to draw his plans and will then be content when the capacity of his house has been reached and put into it no more grain until he can get cars to keep his stuff moving.

The new Buffalo-New York rail pool may be, as explained, merely a "device to keep watch of the grain carried by those roads;" but the arbitrary one-cent increase of the rate from Buffalo, making the present rate to New York four cents per bushel, and the still more arbitrary announcement, on October 27, that no more grain would be contracted for in November, make this diaphanous device look rather substantial. There is only one redeeming feature about the business—the rate, unlike that of the roads west of Buffalo, is likely to be stable for a while, and possibly uniform to all shippers. And that is no small favor in these days.

A meeting has been called by E. P. Bacon of Milwaukee, president of the League of National Associations, to be held at St. Louis on November 20, to take action looking toward the revival of interest in the bill to amend the Interstate Commerce Law. This bill (S. 1439) was buried by the Senate Committee last spring, although it had received the approval of a large number of associated business interests, representing more capital than that of the railroads themselves. It is one of the most important business measures before Congress, and all possible influence, including that of the grain dealers generally, should be brought to bear upon Congress to get the present law amended along the lines proposed by the bill named. Mr. Bacon represents the Milwaukee grain interests.

The story went during the campaign that L. Z. Leiter, when approached for a contribution to the McKinley fund, declined on the plea that he had been the real author of the prosperity which was to be the winning card of the canvass, and should therefore be excused. Grain dealers will be the last to question Mr. Leiter's title as "prosperity's advance agent," when they recall that humming wheat episode of 1897-98 and the good times that came with a rush to them and to the farmers. The interesting thing about Mr. Leiter's refusal to contribute further was the incidental admission that "my son Joe's" deal has

cost him \$7,000,000. This was quite a sizable contribution—quite as large as the campaign committee had any reason to expect, and, all things considered, was really entitled to the prize.

The railway elevators of Wisconsin, according to an opinion of the West Superior city attorney, are part and parcel of the railway system to which they belong, being theoretically used by them in the transportation of grain, and are not, therefore, subject to local taxation, except at the option of the railway company, which may elect to pay local tax thereon in lieu of state tax on the gross earnings. Across the line in Duluth, however, it is different, and the local assessors at Duluth seemed inclined to pile tax enough on their houses to make up for the leakage in West Superior. A certain old railroad lawyer used to say that the average citizen, as jurymen or assessor, smothered his sense of fairness when dealing with railways, and sometimes, indeed, it would seem that he was right. Nevertheless, the roads really don't appear to have suffered inordinately on that account; they manage to keep even somehow, thank you.

Trade Notes

The Marseilles Mfg. Co., Marseilles, Ill., continues to work overtime in order to keep pace with orders.

Kimball Bros. of Council Bluffs, Iowa, have been very busy filling their scale orders this fall, their 5-ton, 8x15-foot scale proving especially popular with the grain trade.

G. M. Sloan of Chicago is placing the machinery in the cement mill near Grand Rapids, Mich., owned by the Newaygo Improvement Co. The Webster Mfg. Co. has the machinery contract.

The J. J. Gerber Sheet Metal Works, Minneapolis, Minn., reports sales of over 300 of the Gerber No. 2 Improved Distributing Spouts the past season, and all of them giving perfect satisfaction.

It is reported that S. Y. Hyde, the well-known elevator man, A. Hirshheimer and others of La Crosse, Wis., are organizing a company to manufacture elevator buckets, tin packages for meat products, etc.

H. E. Furnas, who has recently taken the position of representative, in the Ohio Valley and Eastern territory, for The S. Howes Co. of Silver Creek, N. Y., has established his headquarters at the Spencer House, Indianapolis, Ind.

The Carl Anderson Co., Jefferson and Fulton streets, Chicago, have just published a neat catalog of their Gus Gas and Gasoline Engines. In the rear are a number of facsimile testimonials, including one from Greece and one from Mexico.

Price Current of Machinery and Supplies is an up-to-date illustrated catalog of 100 pages just published by the Webster Mfg. Co., of 1075-1097 West Fifteenth St., Chicago. It contains latest quotations on about everything the grain dealer is ever likely to need.

We recently received a stylishly printed invitation "to attend the dedicatory oyster supper and dance to be given by the Huntley Manufacturing Company in their new building, Tuesday evening, October 30, 1900. Silver Creek, N. Y." We have no doubt the occasion was made an enjoyable one for those who attended.

One of the largest cattle feeders of this country, located at Geneseo, Kan., writes the following to the N. P. Bowsher Co., South Bend, Ind., in regard to their mills: "We are very much pleased with your No. 10 grinder. We have five of them, and with the one which we have had in use the longest time we have, during the past sixteen months,

ground over 150,000 bushels of shelled and ear corn. We think the Bowsher Mill the best on the market for our purposes of grinding cattle feed."

The November number of Graphite, published by the Jos. Dixon Crucible Co., Jersey City, N. J., contains a testimonial from the manager of the Kentucky Public Elevator Co. of Louisville, as to the splendid lasting qualities of Dixon's Silica-Graphite Paint applied to the outside of their elevator seven years ago.

The Garrett Gas Engine Co., makers of the Model Gas and Gasoline Engines, have removed their factory and headquarters from Garrett to Auburn, Ind. The name of the company has also been changed to the Model Gas Engine Co. Don't forget to write them at Auburn, Ind., when you want information about engines of this character.

Sandifur's Computing Tables for reducing weights to bushels and indicating the value thereof at any price per bushel are something that will doubtless be appreciated by many dealers. They save time in settling with customers and insure against errors in figuring. For particulars see the advertisement under Miscellaneous Notices, or write direct to O. B. Sandifur, Flora, Ind.

At the hay convention held in Baltimore last August, Kirwan Bros. Grain Co. of that city distributed a souvenir in the shape of a little diamond-back terrapin. They were not able to supply the demand for them at the time, but have since received an additional supply, which they are sending out to their friends in the trade. It is accompanied by a little communication containing a pun that is not so astute but what it can be readily appreciated by every recipient. Ask Kirwan Bros. to count you in on it.

H. Channon Company, Market and Randolph streets, Chicago, in their monthly quotations for November of flour mill, grain elevator and factory supplies, give illustrations of a large number of their specialties, including Onoko Babbitt Metal, Ajax Transmission Rope, Millers' Delight Sewing Twine, etc., etc. Since locating in its new building the company has been very busy in its various lines thus far this fall and reports the outlook for a continuous good business during the winter. In their new building they have every facility for handling their trade in a prompt and satisfactory manner.

The S. Howes Co. of Silver Creek, N. Y., manufacturers of the well-known Eureka Grain Cleaning machines, have established a permanent western headquarters in Chicago, Ill., at 11 Traders' Building. Mr. B. F. Ryer, as general western manager, is in charge. This company says: "We have for a long time realized the necessity of being nearer to and in closer touch with millers and grain dealers of the West. The western headquarters which we have opened is well equipped with printed matter, etc., in relation to our Eureka machines, and prompt information can be obtained from there. We appreciate the great trade we have had, and are still having from this section of the country, and desire to do everything in our power to expeditiously serve our friends and customers. All communications will receive careful, courteous and prompt attention. Grain men and millers visiting Chicago are invited to call." The advantages to be derived from this step are very obvious.

Four steamers of the Scandinavian-American line will make regular sailings between Copenhagen and Boston, beginning November 20.

The famous Grandin farm of 40,000 acres in the Red River Valley of North Dakota, operated by the Dalrymples, has been divided, the Grandins taking one-half and the two Dalrymples one-fourth each.

Owing to poor crops several California ranches have tried to cancel their contracts for prison grain bags, but the board has decided that the contracts must stand. Under this ruling the 10 per cent advance sent on with orders will be held to be forfeited unless the amounts due under contracts are paid by November 1, or the board will carry the contracts forward for one year and store the sacks if the farmer desires to compromise in that way.

ANOTHER PHASE OF THE QUOTATION QUESTION.

The last attempt in Chicago by the Board of Trade's attorney to shut up an alleged bucket-shop, the Central Grain and Stock Exchange, by an application for a dissolution of the injunction restraining the Cleveland Telegraph Company from cutting off its quotations, proved a failure. The case was heard by Judge Vail of the Decatur district; and the points at issue were narrowed down to the question whether the Central Grain and Stock Exchange is or is not conducting a bucket-shop business.

The testimony for the Board of Trade was affirmative, of course; its witnesses being telegraph operators, blackboard men, speculators, Board of Trade men, etc. The lawyers endeavored to draw the line between a bucket-shop and a legitimate business by the fact that the market quotations on the Board of Trade are made by open bidding in the pit and then posted on the blackboard, while in the bucket-shops the blackboard furnishes the quotation directly, and whatever deals are made on its figures are pure speculation. Several trades of the latter nature were testified to by witnesses, while W. E. Fildes of Bloomington, former agent of the Exchange, testified that he frequently placed orders for from 10,000 to 50,000 bushels of grain with the Exchange in which there was no expectation of delivery of grain, the deals being made on the margins only.

The Exchange defended on the theory that it conducts its business in the same manner that Board of Trade firms conduct theirs, and offered evidence to show the similarity. The Board's attorney objected, holding that the Board of Trade was not on trial and that the judge could not gain any light by comparing the methods of business of one or two Board of Trade men with those of the Central Stock and Grain Exchange. In answer the Exchange contended that the Board of Trade and the Cleveland Telegraph Company are one; that the Central Stock and Grain Exchange makes more actual deliveries of grain than the brokers on the Board, and that he would show that the Board had exceeded its authority in presuming that it had a monopoly of legitimate business methods and that the Central Stock and Grain Exchange is a bucket-shop. Judge Vail ruled that inasmuch as the concern is accused of operating a bucket-shop and the construction of the contract with the Cleveland Telegraph Company is doubtful, the Exchange had the right of defense and the testimony was heard.

A great many Board of Trade men were then put on the stand, and, of course, had to testify that only a small proportion of the business done by them is consummated by deliveries of the actual grain. President Warren, for example, testified that there were ten or twelve houses on the Board dealing exclusively in cash trades, and that the other houses probably would number 200, and that deliveries of grain did not exceed 10 per cent of the volume of trade; while W. E. McHenry, special employe of the United States Treasury Department, testified that 95 per cent of the trades on the Board were settled without deliveries.

At the conclusion of the testimony, Judge Vail remarked that he thought no "fair-minded man could see any difference between the business methods of this Exchange and those of a regular Board house;" that the business is "mere betting on the fluctuations in the price of grain;" that "it is of more interest to the people at large that the Board's quotations should be made public than that the members of the Board of Trade should have the exclusive business," and so on. Later he filed an opinion, which is substantially as follows:

It is held by the Board of Trade and the Cleveland Telegraph Company that the Central Stock and Grain Exchange is a bucket-shop, and that by the statutes they are justified in refusing their quotations to the firm. By the statutes the Board of Trade is not compelled to continue collecting and disseminating its quotations, but so long as it does it must furnish them to all who desire them for lawful purposes. It is the inference of the Board of Trade that the Central Stock and Grain

Exchange does not ask them for lawful purposes, and the inference from the Supreme Court decisions is that it may refuse to provide the quotations. As to the Telegraph Company, it must not furnish quotations to a bucket-shop by its contract with the Board.

The case presents two defenses by the Board against the petition of the Exchange. One is a substantial defense by both the Board and the Telegraph Company, saying that they are not required by law to furnish the quotations. The other defense is technical and relates to the question whether or not the complainant must come into a court of equity with clean hands. There have been many cases involving these quotations and these have given to the same a certain character and to an extent they are charged with public interest.

In my judgment the Board of Trade is a great public institution, absolutely essential to the needs of the commercial world of this country. It has been of great benefit. The transactions, it is said, on the Board of Trade in actual commodities in one year will exceed the entire transactions of the wholesale business houses in Chicago. It almost fixes the prices of commodities; it deals in everything; everything is bought and sold there, especially grain and provisions. It has become of such a character that everybody in this country looks to the Chicago Board of Trade for the purpose of ascertaining prices.

Now, these quotations, in my judgment, should be public. They are affected with a public interest. Almost every farmer in the country consults the quotations of the Board of Trade for the purpose of ascertaining when and at what prices he can sell his farm products. This being the fact, what are the rights of the public, and what are the rights of these parties to these quotations? Can there be any restrictions placed on their publication?

I regard that as the prime and the important question in this case. It is a question that has to be met, and met squarely. Heretofore there have been cases before the court, but there have been no cases exactly like this. The Christie case was a bucket-shop pure and simple, because, while their proof showed that they traded in about \$350,000,000 worth of property in a year, there was not one single delivery. This case is a case which presents this kind of a question: Here is proof, as the court finds, that this Exchange does do some lawful business, it makes some deliveries. It is contended that perhaps some of these deliveries are mere shams. Well, I don't believe that. I believe that that Exchange actually sells and delivers some of the commodities. It is true it is a small per cent, but it is true also that on the Board of Trade itself of speculations in future deliveries only a small per cent are ever actually made.

The question arises in this case: If a man wished to obtain the quotations for a lawful purpose, although he might at the same time use them for an illegal purpose, has the Board of Trade the right, either directly or indirectly, so to hedge these quotations around by contracts or conditions as to prevent the man from obtaining them for the purpose which he claims is lawful? That is the question in this case, and will have to be determined ultimately by a court of authority.

After reviewing some of the evidence, to show that the Board of Trade collects its own quotations, and is still in the business of distributing them, the court continues:

If that is true now, that it is still in that business, has it a right to say in each instance to anybody who applies to it for quotations, "You are carrying on a bucket-shop, and therefore we won't furnish you these quotations?" That is the question presented in this case, in my judgment.

As I said, these quotations, being a matter, I think, charged with a public interest, I think public policy requires that they be published; and in my judgment the Board of Trade has no right to say in advance, "You are carrying on an illegal business, and therefore you shan't have these quotations." If I do engage in an illegal transaction, if I take these quotations and pervert them to improper or illegal uses, I can be proceeded against under the criminal law, and I think that the presumption is that when a man is engaged in trade, that trade is a lawful trade; and I don't think it lies within the mouth of the Board of Trade to say: "You are about to engage, or are engaged, in an unlawful business; therefore I will not furnish you these quotations."

Now, who is to determine that one is carrying on a bucket-shop contrary to the criminal laws of the state of Illinois? How is that question to be determined? Is a chancellor to determine it? Whether a man has committed a crime is by our constitution to be determined by a jury, and until this contract can be forfeited, in my judgment, upon the ground that the man is carrying on a bucket-shop contrary to the criminal laws of this state, there must be a conviction for it.

Now, it is said that the Board of Trade has suppressed in this community, I believe, twenty or

thirty bucket-shops. Now, whether it is true or not I can't tell. The only evidence in the case is that of some witness who was on the stand—who said that he had abandoned his bucket-shop or his place of business where he was dealing in futures and settling upon margins without any intention of delivering the grain, and that he had made application to the Board of Trade for membership and expected to obtain it, and as soon as he obtained it he would carry on business in the same place in the same way. Now, instead of suppressing the bucket-shop business, according to the proof that is here of those dealing in futures where there is no intention to deliver, it simply drives men who are engaged in it into the Board of Trade.

After the decision was read the Board's attorney asked the court if it was to be general or was to hold according to the signed contracts with the Cleveland Telegraph Company only so long as the Central Stock and Grain Exchange did not conduct a bucket-shop. "It is to be general," replied Judge Vail; "for, as I have said in my opinion, the quotations of the Board of Trade are absolutely unrestricted and without discrimination in their distribution."

This decision does not mean an open door for other concerns which have been refused the quotations by the Board, for each will have to make its own fight. The case will be carried to the higher courts.

FRICITION AND HEATED JOURNALS.

Hot journals are traceable to a number of causes. Grit and other foreign substances are liable to get into a bearing and cause it to heat. Friction always develops heat. Its extent is determined by weight or pressure. The amount of heat evolved by friction is exactly sufficient to reproduce the power expended in overcoming the friction. A great weight moving slowly will generate heat by friction as certainly as a light weight moving swiftly; so that it is not always the number of revolutions that creates the fire, but the weight resting on a journal, or the tightness of a belt, or some other condition that makes pressure.

A journal having a tendency to heat should receive constant watching until the source of the trouble can be located. Possibly a thorough cleaning of the bearing and the shaft may give good results, especially if grit or dust may be the cause. Grooves cut in the babbitt metal in the lower half of bearing to allow the free circulation of oil under the shaft will at times have a beneficial effect. A poor quality of babbitt metal in a bearing has a tendency to heat under very ordinary circumstances. In most cases of a hot box it will be found that the journal is in need of rebabbitting and there will be a saving of a great deal of time and unnecessary labor if replacing the old metal with the best quality of babbitt metal is done without delay.

GRAIN EXPORTS, 1900.

The following are the amounts of grain exported from the United States for October, 1900, and the first ten months of 1900, as reported by the Treasury Department:

	1900.	1899.
Barley, bushels, October....	860,994	3,052,801
Value	\$403,510	\$1,460,157
Ten months, bushels ..	11,829,784	10,944,720
Value	\$5,502,723	\$5,430,207
Corn, bushels, October	13,500,093	19,500,778
Value	\$6,337,906	\$7,770,277
Ten months, bushels ..	147,910,201	166,492,545
Value	\$64,972,763	\$67,082,109
Oats, bushels, October	3,031,845	4,024,785
Value	\$916,405	\$1,218,652
Ten months, bushels ..	27,144,091	37,947,385
Value	\$8,270,612	\$11,869,934
Rye, bushels, October	97,787	261,002
Value	\$55,434	\$166,051
Ten months, bushels ..	1,858,373	4,753,261
Value	\$1,114,378	\$3,026,258
Wheat, bushels, October ...	10,774,735	10,772,219
Value	\$7,843,419	\$7,991,799
Ten months, bushels ..	79,840,042	92,534,344
Value	\$37,450,799	\$69,456,957
Total breadstuffs, October ..	\$21,913,832	\$24,041,493
Ten months	\$196,443,980	\$216,833,023

The Peoria distilleries are running at full capacity and mashing 28,000 bushels of corn daily.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Nov. 10, 1900, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore	1,603,000	114,800	690,000	124,000	
Boston	1,143,000	293,000	582,000		
Buffalo	2,890,000	382,000	655,000	141,000	963,000
do. afloat					
Chicago	13,084,000	1,001,000	3,433,000	589,000	71,000
do. afloat					
Detroit	500,000	45,000	141,000	64,000	19,000
Duluth	7,157,000	70,000	503,000	159,000	956,000
do. afloat					
Port William	986,000				
do. afloat					
Galveston	1,002,000				
do. afloat					
Indianapolis	298,000	50,000	22,000	1,000	
Kansas City	1,741,000	82,000	42,000		
Milwaukee	846,000	41,000	410,000	5,000	38,000
do. afloat					
Minneapolis	12,943,000	11,000	1,824,000	13,000	105,000
Montreal	399,000	44,000	173,000	14,000	131,000
New Orleans	416,000	206,000			
do. afloat					
New York	7,254,000	476,000	1,349,000	23,000	398,000
do. afloat					
Peoria	11,000	8,000	514,000	6,000	20,000
Philadelphia	637,000	665,000	543,000	6,000	
Pt. Arthur, Ont.	100,000				
do. afloat					
St. Louis	5,276,000	107,000	45,000	13,000	34,000
do. afloat					
Toledo	1,321,000	473,000	1,285,000	28,000	2,000
do. afloat					
Toronto	97,000		2,000		155,000
On Canals	33,000	224,000	185,000		370,000
On Lakes	918,000	1,249,000	418,000		247,000
On Miss. River	48,000	110,000	21,000		
Grand Total	60,703,000	6,785,000	12,842,000	1,186,000	3,509,000
Corresponding date 1899	52,562,000	11,909,000	6,706,000	1,251,000	2,641,000
Weekly Inc.	671,000			86,000	
Weekly Dec.		1,188,000	114,000		102,000

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at eight primary markets during the eighteen weeks ending Nov. 5, for the last two years, according to the Cincinnati Price Current, were as follows:

	1900.	1899.
St. Louis	14,307,000	6,379,000
Toledo	5,930,000	9,538,000
Detroit	1,237,000	1,625,000
Kansas City	22,651,000	10,132,000
Winter	44,125,000	27,674,000
Chicago	25,203,000	13,106,000
Milwaukee	3,182,000	4,345,000
Minneapolis	29,306,000	31,788,000
Duluth	7,248,000	27,563,000
Spring	64,939,000	76,802,000
Total bus., 18 weeks	109,064,000	104,476,000

RANGE OF PRICES AT CHICAGO

The daily range of prices for cash grain at Chicago for the month ending Nov. 12 has been as follows:

October	NO. 2* R.W. WHT.		NO. 1 NO. 2* S.P. WHT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 1 N.W. FLAXSEED	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
12.	75 1/4	77	74 1/4	75 1/4	41	41 1/4	22	22	55 1/2	55 1/2	171	172
13.	75	76 1/4	74 1/4	75 1/4	41 1/4	41 1/4	21 3/4	22 1/4	54 1/2	55 1/2	169	171
14.												
15.	74	76	73 1/4	74	41 1/4	41 1/4	21 3/4	21 3/4	51	51	173	173
16.	74 1/4	76 1/4	73 1/4	74 1/4	41 1/4	41 1/4	21 3/4	21 3/4	52 1/2	52 1/2	176	176 1/2
17.	74 1/4	76 1/4	73 1/4	74 1/4	41 1/4	41 1/4	21 3/4	21 3/4	52 1/2	52 1/2	179	179
18.	73 1/2	75 1/2	73 1/2	74 1/2	40 1/4	41 1/4	21 1/2	21 1/2	50	53	181	181 1/2
19.	73 1/2	75 1/2	73 1/2	74 1/2	39 1/4	39 1/4	22	22 1/4	49 1/2	49 1/2	185	185
20.	73 1/2	75 1/2	73 1/2	74 1/2	40	40 1/4	22	22 1/4	49 1/2	49 1/2	186	186
21.												
22.	73 1/2	75 1/2	73 1/2	74 1/2	40	40 1/4	22 1/4	22 1/4	50	50	181 1/2	182
23.	73 1/2	74 1/2	73 1/2	74 1/2	40 1/4	40 1/4	22	22	45	49	175 1/2	175 1/2
24.	73	74 1/2	71 1/2	72 1/2	38 1/2	39 1/2	21 1/2	21 1/2	47 1/2	47 1/2	173	173
25.	73 1/2	75 1/2	71 1/2	72 1/2	37 1/2	38 1/2	22	22 1/2			179	179
26.	72	75 1/2	71 1/2	72 1/2	37 1/2	37 1/2	22	22 1/2	49	49	181	182
27.												
28.												
29.	72 1/2	75 1/2	71 1/2	72 1/2	38 1/2	37	22	22 1/2	49	49	175	178
30.	73 1/2	75 1/2	72 1/2	73 1/2	37 1/2	37 1/2	22	22 1/2			174	174 1/2
31.	74	76 1/4	73 1/2	74 1/2	37 1/2	37 1/2	22	22	48 1/2	48 1/2	174	175
November—												
1.	73 1/2	76	72 1/2	73 1/2	37 1/2	37 1/2	22 1/2	22 1/2			175	177
2.	73 1/2	76	72 1/2	73 1/2	37 1/2	37 1/2	22 1/2	22 1/2			181 1/2	184
3.	73 1/2	75 1/2	72 1/2	73 1/2	37 1/2	37 1/2	22 1/2	22 1/2			180	181
4.												
5.	74	76	72 1/2	73 1/2	39 1/4	39 1/4					180	180
6.												
7.	73 1/2	75 1/2	72 1/2	73 1/2	39 1/4	39 1/4	22 1/2	22 1/2			178	178
8.	72 1/2	75 1/2	72 1/2	73 1/2	38 1/4	38 1/4	22 1/2	22 1/2			178	178
9.	73 1/2	75 1/2	71 1/2	72 1/2	38 1/4	39 1/4	22 1/2	22 1/2			178 1/2	178 1/2
10.	73 1/2	76 1/4	73 1/2	74 1/2	39 1/4	40					183	183

* Nominal price. † Holiday.

During the week ending October 19, Prime Contract Timothy Seed sold at \$4.15@4.40 per cental; Prime Contract Clover Seed at \$10.00@10.25; Hungarian at \$0.65@0.80; German Millet at \$0.80@1.10; buckwheat at \$1.30@1.50 per 100 pounds.

During the week ending October 26, Prime Contract Timothy Seed sold at \$4.25@4.30 per cental; Prime Contract Clover Seed at \$10.00@10.25; Hun-

garian at \$0.65@0.80; German Millet at \$0.85@1.10; buckwheat at \$1.35@1.50 per 100 pounds.

During the week ending November 2, Prime Contract Timothy Seed sold at \$4.25@4.30 per cental; Prime Contract Clover Seed at \$10.00@10.25; Hungarian at \$0.65@0.80; German Millet at \$0.85@1.10; buckwheat at \$1.15@1.35 per 100 pounds.

During the week ending November 9, Prime Contract Timothy Seed sold at \$4.20@4.30 per cental; Prime Contract Clover Seed at \$10.00@10.25; Hungarian at \$0.65@0.80; German Millet at \$0.85@1.10; buckwheat at \$1.15@1.25 per 100 pounds.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending November 10, as compared with same weeks last year, have been as follows:

Articles.	For week ending Nov. 10. Nov. 11.		For week ending Nov. 3. Nov. 4.	
	1900.	1899.	1900.	1899.
Wheat, bushels	1,294,000	1,896,000	1,339,000	1,877,000
Corn, bushels	3,728,000	4,182,000	3,959,000	4,726,000
Oats, bushels	259,000	371,000	1,280,000	505,000
Rye, bushels	30,000	17,000	44,000	16,000
Barley, bushels	134,000	563,000	42,000	565,000
Flour, barrels	294,900	315,000	361,400	335,400

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 15 months ending with October as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1900-01.	'99-1900.	1900-01.	'99-1900.
August	1,125,750	624,375	749,135	670,392
September	764,250	1,231,875	522,880	775,135
October	931,500	1,163,814	536,684	348,149
November		1,068,698		555,308
December		812,875		494,339
January		174,000		233,423
February		259,500		110,605
March		339,750		221,285
April		198,750		90,953
May		206,250		204,890
June		16,500		16,068
July		20,000		53,361
Total bushels	2,821,500	6,297,382	1,808,679	3,773,908

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of October, 1900:

BALTIMORE—Reported by Wm. F. Wheatley, secretary of the Chamber of Commerce:

Articles.	Receipts.		* Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	845,025	639,461	738,965	596,012
Corn, bushels	2,972,979	5,917,934	1,865,677	4,537,680
Oats, bushels	1,044,801	1,117,010	456,655	698,580
Barley, bushels	37,368	12,931	1,104	
Rye, bushels	169,928	157,744	8,571	84,093
Timothy Seed, bushels	32,980	34,720		7,013
Clover Seed, bushels	13,136	22,353	7,461	12,315
Hay, tons	4,859	3,438	1,441	1,395
Flour, bbls.	448,435	455,765	377,430	228,869

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce:

Wheat, bushels	881,842	823,666	1,038,017	1,246,590
Corn, bushels	1,694,718	1,297,667	1,473,599	1,032,843
Oats, bushels	1,002,314	1,016,195	341,156	684,701
Barley, bushels	17,705	241,497	1,000	277,178
Rye, bushels	600	1,720		
Flax Seed, bushels	151,040	146,180	99,256	94,729
Hay, tons	14,400	12,090	1,246	1,246
Flour, barrels	278,293	281,466	168,677	175,815

BUFFALO—Reported by Chas. H. Keep, secretary of the Merchants' Exchange:

Wheat, bushels	5,717,903	6,076,308	7,096,000	6,093,100
Corn, bushels	11,093,403	9,398,819	9,489,000	9,019,600
Oats, bushels	4,265,500	2,542,021	3,437,000	1,877,000
Barley, bushels	2,743,600	4,190,171	670,000	1,777,000
Rye, bushels	207,649	466,650	56,000	232,800
Grass Seed, lb.	9,800			
Flaxseed, bushels	1,353,084			
Hay, tons				
Flour, barrels	9,308,628			

* Shipments by Railroad.

CHICAGO—Reported by George F. Stone, secretary of the Board of Trade:

Wheat, bushels	6,040,253	4,579,408	5,505,985	373,028
Corn, bushels	12,089,950	16,100,200	13,771,723	16,178,989
Oats, bushels	9,063,993	10,196,281	7,832,448	7,988,569
Barley, bushels	3,465,641	3,547,629	851,861	1,288,133
Rye, bushels	282,486	334,489	96,495	109,770
Timothy Seed, lb.	4,431,707	8,076,950	4,905,691	4,735,991
Clover Seed, lb.	2,282,168	1,804,917	554,355	1,747,977
Other Grass Seed, lb.	1,127,980	652,300	832,003	1,960,343
Flaxseed, bushels	840,582	1,107,256	452,632	353,102
Broom Corn, lb.	2,243,506	5,888,500	1,115,472	1,473,371
Hay, tons	20,012	20,645	383	2,081
Flour, barrels	676,841	516,782	510,697	374,974

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce:

Wheat, bushels	96,981
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ELEVATOR

GRAIN NEWS

AMONG CHICAGO'S ELEVATORS.

Chicago elevators very generally observed election day, with few exceptions closing down the latter part of the day.

Michigan Central Elevator B at Kensington, Cook County, Ill., has only been operated at intervals during the past month. Elevator A is in active operation. These houses are operated by F. J. Meadiff. A. H. Keller is his superintendent.

There has recently been installed in the Mabbatt Elevators A and B, at Archer Avenue and Wood Street, a new Edison dynamo, switchboard and wiring for a standard system of electric lighting. The capacity of the plant is 1,200,000 bushels.

The City Elevator of the Chicago Terminal Elevator Co. is having its cupola repaired and metal drain pipes for the roof put up. This house has a capacity of 1,000,000 bushels and is located south of Twelfth Street on the South Branch of the river.

The Sibley Elevator "A" has only run at intervals since it recommenced operations in September, and has now closed down entirely. This house has a capacity of 250,000 bushels and is owned and operated by L. M. Fairbanks. The superintendent is C. M. Dauberman.

The St. Louis Elevator and Annex is another house that has found it necessary to enlarge its entrances for the passage of the larger size of freight cars now in use. This plant is owned and operated by Keith & Co., and is situated on the South Branch of the Chicago River.

The New England Elevator at Forty-ninth Street and Homan Avenue, with an iron fire escape on the outside. The stairway has been inclosed with 2-inch plank lined with sheet iron. The building is owned by the Chicago & Grand Trunk Railway and is operated by La Sier & Hooper. It has a capacity of 115,000 bushels.

Requa Brothers' elevator, situated at Forty-fourth Street and the Wabash Railroad tracks, closed down for an indefinite period October 31. The engine is being overhauled and general repairs are being made. This house has a capacity of 125,000 bushels. It is operated by Requa Brothers, the owners. W. S. Bowen is the superintendent.

The Chicago & Danville Elevator, having a capacity of 350,000 bushels and operated by Carrington, Hannah & Co., has shipped out by water a total of 549,251 bushels of grain during the past season. Geo. H. Pendleton is superintendent of this house, which is located at Levee Street, South Ashland Avenue and the South Branch of the Chicago River.

Chas. Connelman & Co.'s Englewood Elevator, situated between Sixty-third and Sixty-fourth streets and State Street and Wentworth Avenue, has been closed since about the first of June. It is in excellent repair and a watchman is in charge of it day and night. A new chemical fire-fighting apparatus has been installed. The elevator is located on and owned by the C., R. I. & P. Ry.

The Wetherell Elevator, formerly known as the Pickering, is now undergoing repairs. The entire building is being newly iron clad and painted. The interior and machinery are also being thoroughly overhauled. This plant was built in 1890 and is owned and operated by O. D. Wetherell. It is located on the C., A. & St. L. Ry., between Mary and Quarry streets, and has a capacity of 100,000 bushels.

The Grand Crossing Elevator has placed a T-II. Incandescent Dynamo, with a capacity of 24 lights, and a 4 h. p. engine in the engine house for lighting that and the boiler room. Among other improvements the stair tower has been cut off at the first floor by 2-inch planks and additional fire-fighting apparatus placed. This house has a capacity of 50,000 bushels, is situated at Seventy-seventh Street and the Illinois Central R. R. It is owned by the Aldrich Estate and operated by F. Ely. The superintendent is H. S. Wenner.

The Oxford Elevator at South Chicago, formerly known as Fox & Bowerman's elevator, has recently changed hands. The new lessees have made extensive improvements, putting new screens on the windows, repainting the building and thoroughly repairing the engine and machinery. A new smokestack has been placed on the boilers. The stair and belt tower is to be inclosed and the engine and boiler room cut off from the elevator by a standard iron door. The old grain cleaning machinery is to be replaced with modern machinery of larger capacity. The building has been equipped throughout with new fire fighting apparatus. This plant has a capacity of 125,000 bushels, is owned by J. A. Murphy and operated by E. A. Lord &

Son. It is located at Ninety-fourth Place and Notre Dame Avenue, South Chicago. F. E. Lovett is superintendent.

McReynolds' Elevator "A" at South Chicago is to be equipped throughout with the Automatic Journal Alarm System. The installation of a fire underwriters' pump with standpipe and hose connected on each floor, for fire protection, is also under consideration. Screens are being placed on all windows. The weighman's and superintendent's offices are to be heated by steam. This house has a capacity of 1,500,000 bushels and 107 bins, and is owned and operated by McReynolds & Co.

The Matteson Elevator, on the Michigan Central Railroad's Joliet cut-off at Matteson, Cook County, Ill., is in operation again, after a considerable shut-down for repairs. A 60-inch by 16-foot boiler and a 70-foot iron smokestack have been placed in the boiler room. The interior of the house and the machinery has received a thorough overhauling. The house does a large business in cleaning and clipping white oats. It is owned by the M. C. R. R., and is operated by C. L. Dougherty of Chicago.

The Nebraska City Packing Co.'s elevator, situated at Twenty-third Street and the South Branch, is another house where the low construction will not allow cars of the larger size to get in. Some changes are contemplated to obviate this difficulty. This elevator is one of the few that have introduced the important innovation of electric hand lanterns and entirely discarded the old-style lard oil lantern. The owners now contemplate placing electric arc lights on the first floor.

The Columbia Elevator has again ceased operations, after a short interval of working following a period of idleness of six weeks. During the latter period the bins were empty, but they have been refilled and remain so at the present time. The plant has a capacity of 200,000 bushels, of which 120,000 is in bins and 80,000 bushels in tanks. It is situated on Robey Street, south of Blue Island Avenue, is owned by Geo. A. Seaverns and operated by the Armour Elevator Co. Mr. A. De Groodt is superintendent.

The Lake Shore Transfer Elevator is a very busy house these days and has had but little idle time during the past season. The stair and rope tower is to be inclosed on the first floor, all windows to be screened and the roadway from South Park Avenue put in good condition, making the plant accessible to the fire department and thereby securing a reduced insurance rate. This elevator has a capacity of 125,000 bushels. It is situated at Sixty-sixth Street and Calumet Avenue, on the Lake Shore & Michigan Southern Ry., which company owns the property. Churchill & Co. are the operators and F. J. Helm, superintendent.

The Chicago & Grand Trunk Elevator at Elsdon, Chicago, has received several important improvements during the past month. A new stone foundation has been placed under the brick engine room. Fans, Cyclone Dust Collectors and conduits have been put in first-class shape so as to prevent the nuisance of escaping dust. This house has been working with great regularity and has handled a large amount of grain during the past season. The elevator has a capacity of 30,000 bushels and is operated by Rogers, Bacon & Co. It is situated at Fifty-third Street and Central Park Avenue. E. O'Rourke is the superintendent.

The Santa Fe Elevator, situated at South Wood Street and the West Fork of the South Branch of the Chicago River, has recently received a fresh coat of paint on outside and roof. The steamer Arthur Orr was loaded with 125,000 bushels of corn at this house November 6 for Buffalo. For several months past this elevator has worked days, nights and Sundays and has accomplished a vast amount during that time, handling over 100 cars daily and loading a boat every day during the month, Sundays included. It has now again settled down to its normal condition. This plant has a capacity of 1,500,000 bushels and 201 bins. It is owned by the Santa Fe Railroad Company and operated by Richardson & Co. Burt Parker is the superintendent.

The Indiana Elevator, located at Twentieth Street and the South Branch of the Chicago River, is undergoing extensive repairs and improvements. All the machinery is being overhauled, boxes rebabbitted and new shafting put in where necessary. The garners, scales and receiving hoppers, some 45 in all, have been newly iron lined. The steam fire pump, which is a Worthington, with 6-inch suction and 5-inch discharge, has had the rods turned down and new valves and plungers put in. The metal roof has been given a coat of paint. Two outside fire ladders from cupola to first floor are to be put up at an early date. The dock is to be rebuilt. The equipping of the building with an automatic sprinkler system is now under consideration. The brick office building has been remodeled and refitted. This plant, formerly owned and operated by the Chicago Elevator Co., is now the property of the Chicago & Western Indiana Rail-

road Company and is occupied by the American Cereal Co. The superintendent is A. P. McDonald.

The Chicago & Erie Elevator has been one of the busiest houses in Chicago during the present season, having worked days, nights and Sundays with two crews for a long time. This plant is located at Fiftieth and Wallace streets. It has a capacity of 100,000 bushels; is owned by the Chicago & Erie Railroad Company and operated by the Interstate Elevator Company. C. W. Austen is the superintendent and W. Tweedale the foreman.

The Chicago & Grand Trunk Transfer Elevator at Elsdon, Chicago, formerly operated by the owners, has been leased by Rogers, Bacon & Co. It has no bins and is used wholly for transferring. The high winds during August played havoc with the roof and windows. These have been repaired and the machinery in general overhauled. A good supply of water barrels, fire pails and metal waste cans have been distributed throughout the house, and the steam heating apparatus refitted. Steam power is furnished from the Chicago & Grand Trunk Elevator, which is but 15 feet distant. E. O'Rourke is superintendent of both houses.

The St. Paul and Fulton elevators have been very busy during the past few weeks. The larger boats that load at the Armour houses on the South Branch do not take on a full cargo owing to the liability of getting stuck on the tunnels or between the piles and bridges, so they drop down to the St. Paul and Fulton to complete their loads. Prior to starting up this fall a new boiler was installed and the entire battery was reset. All windows have been screened and the stair and belt towers inclosed on the first floor. The roofs have been repaired and the water barrels brined in preparation for the cold weather. These elevators have a joint capacity of 1,300,000 bushels. They are owned by the C. M. & St. P. Ry. and operated by the Armour Elevator Co. J. Sinclair is superintendent.

The National Elevator & Dock Co. have found it necessary to lower the tracks in their National Elevator some seven inches, owing to the ceiling of the first floor being too low to admit the larger size cars now being used so extensively. The roofs of the cars came into contact with the overhead beams and braces and caused damage and trouble on both sides. The south wall of this house has recently been partly rebuilt and all bin anchors have been lowered some nine inches. The new dock has also been completed. This is one of the few elevators having heads, legs, boots, spouts, garners and scale bins constructed of iron. This plant has 168 bins and a capacity of 800,000 bushels. It is located on the South Branch at Wallace Street and Archer Avenue. O. C. Nelson is foreman.

Central Elevator A, on the Chicago River near the foot of South Water Street, was one of the busiest houses in the city for at least two months this fall. It ran night and day and shipped by boat over 5,000,000 bushels of grain. At present it is working at normal capacity. On the east of Elevator A is Central Elevator B. A boat slip separates the two houses and a canal boat is brought into requisition for transferring grain from one house to the other. A 60-inch by 16-foot John Mohr Boiler has been added to the battery of boilers. A Metcalf Grain Drier, which has not been in use for some time, is being used for a grain ventilator, cold air only being used. This elevator is owned by the Illinois Central Railroad Co. and operated by Carrington, Hannah & Co. F. G. Roberts is superintendent.

Rock Island Elevator A was the scene of active operations during September and October. Twenty-one boats were loaded during that time, in addition to a large number of cars. This house is experiencing the same trouble that is affecting other Chicago elevators, namely: That the mammoth sized cars now in use on the railroads cannot enter the building. To obviate this will necessitate the removal of the large upright timbers and replacing them in a different position. This house has a capacity of 1,250,000 bushels. Rock Island B has been a close second to its sister, A. During the two past months it has received an average of 75 cars a day and loaded 9 boats. This plant has a capacity of 800,000 bushels. Each of these houses is to be equipped with two outside iron fire escapes. These elevators are situated at Twelfth and Fourteenth streets and the South Branch of the Chicago River. Chas. Connelman & Co. are the operators and Jeremiah McKee is superintendent, succeeding the late Timothy Sammons.

The Hayford Elevator, which has been idle since last April, was formerly known as the Farmer Harris Elevator, then became the property of G. H. Sidwell & Co. and later was purchased by the present owner and occupant, C. H. Fowler. Extensive improvements have been made in the plant. The frame boiler house has been replaced by a substantial brick one, two new boilers, an engine and electric lighting plant installed. The plant has also been equipped with a Worthington Steam Fire Pump, standpipe and hose system, Miller Chemical

Extinguishers, fire axes, etc., for fighting fire. This plant has a capacity of 100,000 bushels, 14 bins. The equipment includes one Monitor Separator, two Morgan Oat Clippers, two elevators, iron tanks, one screen, one drag and one belt conveyor. The chicken breeding establishment—incubators and brooding houses—that Mr. Fowler had adjacent to the elevator, has been moved to Benton Harbor, Mich. This plant is situated on the Belt Railroad and the C. & G. T. Ry. at Seventy-fifth Street and South Kedzie Avenue, Hayford.

ILLINOIS.

Thos. Ferguson is building an elevator at Etna, Ill.

The new elevator at Cardiff, Ill., is about completed.

G. A. De Long is completing a new elevator at Foosland, Ill.

Elvia Davis has engaged in the grain business at Cadwell, Ill.

W. Arthur Reynolds has sold out his grain business at Evans, Ill.

Corn cribs are being erected in connection with the elevator at Kings, Ill.

A large elevator is being built at Urbana, Ill., by J. B. Walton of Champaign.

The project of building a third elevator at Tampico, Ill., has been abandoned.

The elevator at Woosung, Ogle Co., Ill., has been torn down and will be rebuilt.

The Etherley Grain Co., Etherley, Ill., have built cribs and are buying ear corn.

The Mattoon Elevator Co. are rebuilding their elevator at Lafayette Heights, Ill.

Boyer Bros., Tampico, Ill., are now doing business in the Glassburn Elevator.

The two elevators at Onarga, Ill., have recently increased their storage capacity.

Greenleaf & Co. are enlarging and improving their elevator at Murrayville, Ill.

J. W. Parker has sold his elevator at Tabor, Ill., and purchased a hotel at Beason.

The Farmers' Elevator Co. have purchased Parker & Ingram's elevator at Tuscola, Ill.

It is reported that another elevator may be built at Ransom, Ill., by a Mr. Richardson.

Swanson Bros', elevator at Paxton, Ill., has been purchased by the Union Elevator Co.

Whyte & Son, Nunda, Ill., have installed a gasoline engine for operating their elevator.

J. N. Black of Tolono, Ill., has sold the elevator at Tampico, which he recently purchased.

The Pratt-Baxter Grain Co., Stonington, Ill., have purchased a No. 2 Cornwall Corn Cleaner.

Fairbanks, Morse & Co., Chicago, were recent purchasers of a No. 0 Victor Corn Sheller.

J. H. Taggart & Son of Wenona, Ill., have replaced their 6½-h. p. engine with one of 16 h. p.

V. R. St. John of Harvey, Ill., is buying and shipping grain at Buffalo Hart this fall and winter.

Jordan Bros. of Heyworth, Ill., are to install a steam engine to furnish power for their elevator.

The new 20,000-bushel elevator at Seatonville, Ill., was opened last month, with A. J. Ryder in charge.

J. H. Eversole informs us that he is going to build a 25,000-bushel elevator at Sublette, Lee Co., Ill.

Wm. Callahan of Monarch, Ill., is remodeling and enlarging his elevator and putting in a 12-h. p. engine.

Bane & Larison of Ellsworth, Ill., started to handle grain in their new elevator the middle of last month.

A 25,000-bushel elevator is to be built at Burtonview, Ill., by the Gordon Milling & Grain Co. of Lincoln.

W. H. Council has commenced work on his new elevator at Williamsville, Ill., on the site of his former building.

Rogers, Bacon & Co. are putting a larger gasoline engine in their elevator at Heyworth, Ill., and making other repairs.

The Weller Mfg. Co., Chicago, was a recent purchaser of a No. 4 Cornwall Corn Cleaner and a No. 0 Victor Corn Sheller.

Work has been commenced on an elevator and mill at Farmer City, Ill., for J. H. Williams. The foundation is 30x36 feet.

Holmes & Ashbaugh of Dunlap, Ill., have torn down their old elevator and started work on a new one, which will be a thoroughly up-to-date

plant. It will have two dumps and be operated by gasoline power.

Barnett Bros. are completing their new elevator at Barnett, Ill. It is being equipped with corn sheller, gasoline engine, etc.

Derrough & Rising, Mahomet, Ill., have placed some new machinery in their elevator, which increases its handling capacity.

T. U. Fox has an elevator nearing completion at Sinclair, Ill. Mr. Fox is also engaged in the general merchandise business.

The Farmers' Grain & Coal Co. of Mason City, Ill., is reported to have handled 350,000 bushels of grain during its first year's run.

John Mosher, a farmer living near Thawville, has purchased the Merritt Elevator at Roberts, Ill., and will take possession December 1.

Jones & Epps of Metcalf, Ill., have their elevator at Garners Crossing about ready to take in grain. They already have their cribs about full.

Luehrmann, Kopplin & Co., Altamont, Ill., have incorporated with a capital stock of \$7,000 to deal in grain, coal, live stock and implements.

The Williams Elevator at Mt. Morris, Ill., was purchased by the Neola Elevator Co. of Chicago, last month, and they took charge November 1.

E. M. Willits' elevator at Joy, Ill., is being enlarged by an addition, 24x36 feet, which will increase its capacity from 25,000 to 55,000 bushels.

G. W. Maddin of Thawville and C. M. Maddin of Del Rey purchased the Danforth Elevator at Del Rey, Ill., and took possession on November 1.

Since the death of Mr. Orten, of the grain firm of Spellman, Orten & Spitley at Lincoln, Ill., the style of the firm has been changed to Spellman & Spitley.

Samuel Allerton has completed his 200,000-bushel elevator at Allerton, Vermilion Co., Ill. It is said to be the finest equipped elevator on the C. & E. I. road.

C. R. Betts has sold out his grain and coal business at Naperville, Ill., which he recently advertised for sale in the "American Elevator and Grain Trade."

The Skillin & Richards Mfg. Co. have installed one of their heavy car pullers, using wire rope, in the Lake Shore Transfer Elevator at Englewood, Chicago.

The Tuscola Grain & Coal Co., Tuscola, Ill., has been incorporated with a capital of \$5,000, to deal in grain, coal and seeds. The incorporators are J. C. Collins, A. Meister and F. Bennett.

E. & P. Sauer's elevator at Schulline, Ill., is about ready to begin operations. It has capacity for 6,000 bushels of wheat and will be run by a 4-h. p. gasoline engine. D. G. Wornock is the buyer.

Seward & Hurd, grain dealers at Victoria, Ill., are erecting corn cribs. The elevators there, as at hundreds of other points, have had their capacity taxed to the utmost owing to shortage of cars.

The St. Louis Milling Co., Carlinville, Ill., has recently been taking in corn at the rate of about 2,000 bushels a day. Chris R. Aden is doing the buying for them. They are building a new elevator.

The Neola Elevator Co. are remodeling their elevator at Adeline Station, Ill., putting in a new dump and machinery of larger capacity. They have a new crib there over 200 feet long, already filled with corn.

Work has commenced on a new 135,000-bushel grain elevator at Grant Park, Ill., for Holzman & Bennett Grain Co. G. T. Burrell & Co. are the builders. Power will be furnished by a Burrell Gas Engine.

The Marseilles Mfg. Co., Marseilles, Ill., was a recent purchaser of the following Barnard & Leas machinery: One No. 0 Victor Corn Sheller, one No. 0 single screen corn cleaner and one No. 2 Cornwall Corn Cleaner.

W. H. Hutchins, recently of Chicago, has purchased the Angspurger Elevator at Farmer City, Ill., which for the past year has been leased by the Cleveland Grain Co. Mr. Hutchins has been overhauling and repairing the property.

The directors of the Mt. Pulaski Grain Co., Mt. Pulaski, Ill., last month elected John Lincoln president; M. A. Eisinger, vice-president, and Geo. H. Hubbard, secretary and treasurer. Mr. Lincoln founded this company 12 years ago and his friends there are pleased to hear of his return to the grain trade again.

The Barnard & Leas Mfg. Co. report the following recent sales through the Webster Mfg. Co., Chicago: Five No. 2 Victor Corn Shellers, one No. 2 Cornwall Corn Cleaner, two No. 2 Improved Double Screen Corn Cleaners, one No. 3 and one No. 4 Cornwall Corn Cleaners, one No. 0 and one No. 00 Victor Corn Shellers, one No. 00 Little Victor Corn

Cleaner and one No. 1 Little Victor Corn Sheller and Cleaner combined.

The Churchill-White Grain Co. of Chicago has recently built elevators on the 3-I Railroad at the following points, Illinivi, Monentz and Northwest Junction, Ill. The machinery equipment, including Burrell Gasoline Engines and Salem Elevator Buckets, was furnished by the Skillin & Richards Mfg. Co. of Chicago.

The Calumet Grain & Elevator Co., Chicago, has completed the improvements and the addition to its elevator at South Chicago. Salem Elevator buckets of the large size of 28 inches were used, also a 44-inch belt conveyor. This is said to be the largest belt conveyor in Chicago. The conveyor is equipped with one of Skillin & Richards' self-propelling trippers. All the machinery was furnished by Skillin & Richards Mfg. Co., Chicago.

CENTRAL.

An elevator is being built at Otterbein, Ind.

An elevator is soon to be erected at Ash Grove, Ind.

A grain elevator is being completed at Marshfield, Ind.

Hunter's Elevator at Montrose, Mich., has been completed.

The new elevator at Naomi, Ohio, is nearly ready for business.

G. C. Campbell of Atlanta, is building an elevator at Kinderhook, Iowa.

Tod Kincaid is completing a 10,000-bushel elevator at Kirby, Mich.

P. M. Crago of Ney, Ohio, contemplates adding a grist mill to his elevator.

The Colburn Grain Co., Colburn, Ind., has built additional storage room for corn.

J. C. Liken & Co. have succeeded the Unionville Elevator Co. at Unionville, Mich.

Molland & Wright of Bellevue, Ohio, have purchased the elevator at Colby, Ohio.

William Singer has succeeded to the grain business of Longwell Bros. at Dixon, Ohio.

Marsh & Co. of Willow Branch, Ind., are now doing business in their enlarged elevator.

Henry Hobby & Son are doing business in their new warehouses at Oceana Center, Mich.

J. F. Pearson has succeeded J. A. McLeland & Co. in the grain business at Terhune, Ind.

Mr. Sluterbach has sold his interest in the grain firm of Witmore & Sluterbach at Van Wert, Ohio.

Magee & Poffenbach of Elmore, Ohio, have their new elevator about ready to receive the machinery.

W. Hardman is building an elevator at Cable, Ohio, to replace the one destroyed by fire last June.

Harry N. Hammond of Bay City, Mich., has organized his business as the Harry N. Hammond Seed Co.

The Harshman Elevator at Enon, Ohio, is being rebuilt. In the meantime grain is being loaded into cars direct.

The elevator at West Manchester, Ohio, has been closed recently pending a settlement of the estate of Anderson Leas.

Columbus, Ohio, will have a new elevator early next season. Herr & Co. are said to be interested in the building of it.

E. A. Cutler, Wolcottville, Ind., recently purchased a No. 00 Victor Corn Sheller and a No. 00 Little Victor Corn Cleaner.

Keck & Christman Bros., Bryan, Ohio, have installed in their new plant a Victor Corn Sheller and Cornwall Corn Cleaner.

Middlesworth & Co. have built an addition to their elevator at Linden, Mich. They have done an active business in beans this fall.

The Barberton Feed Store of Barberton, Ohio, has purchased a feed grinder and 25-horsepower gasoline engine of the Detroit Motor Works.

Huston & Hill of East Liverpool, Ohio, have secured property at Alliance, Ohio, on which they expect to erect a grain elevator and mill.

Dunlap Bros. have completed a grain elevator at Alger, Hardin County, Ohio. It is a thoroughly modern affair, operated by a gasoline engine.

It is reported that J. R. and P. W. Millikan of New Castle, Ind., will build a grain elevator at Blomitsville, when the new railroad goes through that town.

The Wayne Grain & Milling Co., Leipsic, Ohio, which was recently incorporated under the laws of Ohio, has secured the elevators at Milton, Tontogany, Weston, Belmore and Leipsic, which were

formerly conducted by Churchill & Co. C. W. Franklin, one of the incorporators, will be general manager.

Edgar Collier of Fowlerville, Mich., has purchased a 6-horsepower gasoline engine of the Detroit Motor Works for running his feed grinder.

Harry J. Gordon of Oak Harbor has leased the Hunter Elevator at Clyde, Ohio, and put in a 25-horsepower Detroit Motor Works gasoline engine.

It is reported that the McMorran Milling Co. are preparing to erect an elevator 59x100 feet at Port Huron, Mich. Their plant was destroyed by fire a few weeks ago.

F. B. Spear & Sons have installed a Willford Three-Roller Feed Mill in their establishment at Marquette, Mich. The mill and elevator is operated by electric power.

Max Symons, formerly of Clio, and C. W. McCallum have leased land from the P. M. Railroad Company at Bridgeport, Mich., and will build and operate an elevator.

The East Side Iron Elevator Co. of Toledo, Ohio, has reconstructed its belt conveyor system, putting in Skillin & Richards' improved concentrating rollers and bearings.

The Toledo Elevator Co. of Toledo, Ohio, has just placed an order with the Skillin & Richards Mfg. Co. for belt conveyor appliances and Salem buckets for their Elevator C.

The Kerlin & Ryan elevator at Flora, Ind., has been purchased by W. H. Miller and David Kern of Frankfort, who have moved to Flora and taken charge of the business.

It is reported that the people of Raymond, Ind., want a grain and produce market there and unless some one builds an elevator there by another season local parties will organize for this purpose.

The Wayne Grain & Milling Co. of Leipsic, Ohio, has been incorporated with a capital stock of \$10,000, by Wm. R. Worts, Radford L. Burge, A. F. Files, James E. Churchill and Frederick L. Geddes.

The addition to the Interior Transfer Elevator at South Bend, Ind., is completed. One of Skillin & Richards' heavy car pullers with wire rope and Salem buckets was included in the equipment of machinery.

The new Keck & Christman Bros' elevator on the L. S. & M. S. Ry. at Bryan, Ohio, was completed and opened for business on October 15. They buy grain, hay and grass seeds and sell lime, cement, coal, salt, etc.

A recent report from Shelbyville, Ind., stated that corn was being marketed so fast at 30 cents a bushel that the elevators were unable to ship it out fast enough on account of not being able to secure enough cars.

The Duckwell-Harman Rubber & Supply Co. of Indianapolis, Ind., has purchased from the Barnard & Leas Mfg. Co. one No. 1 and one No. 2 Victor Corn Shellers and one No. 1 and one No. 2 Corn wall Corn Cleaners.

The Churchill-White Grain Co., of South Bend, Ind., are erecting an addition to their grain elevator, and have placed their order for the necessary machinery to be used in same with the Dodge Manufacturing Co., of Mishawaka.

G. M. Sloan, grain elevator contractor, Chicago, is building a grain elevator at Ashgrove, Ind., for the Lafayette Elevator & Milling Co., capacity about 40,000 bushels. Power is furnished by an Atlas Steam Engine. The Webster Mfg. Co. furnished the machinery.

T. E. Ferguson, who for nineteen years has had entire control of the C. H. & D. Elevator Co. at Toledo, Ohio, has resigned his position and on November 1 went to Buffalo to look after the grain interests of Churchill & Co. The three offices formerly held by Mr. Ferguson have been filled by officers of the C. H. & D. R., as follows: R. B. Turner, director; A. W. S. Irvine, secretary; Geo. R. Balch, treasurer.

THE DAKOTAS.

The new elevator at Granville, N. D., has been completed.

The Monarch Elevator Co. has closed its house at Oriska, N. D.

J. W. Reedy completed his new elevator at Beresford, S. D., last month.

The Interstate Grain Co. has closed its elevator at Kelso, N. D., for the season.

The Bagley Elevator Co. have installed an Evans Wagon Dump in their elevator at Glenham, S. D.

Steve Cahill of Frederick has leased and is operating the Bickelhaupt Elevator at Aberdeen, S. D.

Superintendent Wilson, of the Northern Pacific, recently made a trip over the new Casselton-Dickey extension with a party of elevator men and selected

the sites of the new elevators to be built at the several stations along that route.

The National Elevator at Cummings, N. D., was reopened on October 16 with O. A. Stondahl as agent.

The Osborne & McMillan Elevator Co. have installed at their new elevator at Velva, N. D., an Evans Wagon Dump.

The Barnett & Record Co. have just completed a 25,000-bushel grain elevator for the National Elevator Co. at Altamont, S. D.

The Atlas Elevator Co. have placed an Evans Patent Wagon Dump and a No. 2 Gerber Grain Distributor in their new elevator at Altamont, S. D.

The Monarch Elevator Co. is selling cleaned seed wheat to farmers in North Dakota for 10 cents a bushel above the market price.

Several elevators have been completed at Wagner, on the new Milwaukee extension in Chas. Mix County, S. D. Those at Geddes are also about ready for business.

W. C. Lestikow, miller at Grafton, N. D., has secured the elevator at Walhalla, erected last year by Howard Hogg. He has stationed John Schmidt there to buy milling wheat.

The stockholders of the Farmers' Elevator Co., James, S. D., held a meeting last month, made good the defalcation of \$3,200, and reopened the elevator for business. The dividend last year was 50 per cent.

The LaRne-Miller Elevator at Devils Lake, N. D., has been completed and is now in operation. It has a storage capacity of 30,000 bushels and is equipped with a grain separator, feed grinder, 24-horsepower gasoline engine and Fairbanks 12,000-pound scale with computing beam. The firm consists of Ed. and Louis LaRue and Trueman Miller.

MISSOURI, KANSAS AND NEBRASKA.

Palmer, Neb., has a new elevator.

A farmers' elevator is being built at Verdi, Kan.

G. C. Doehling has sold his elevator at Bruno, Neb.

Jacob Winterscheidt has a new grain elevator at Germantown, Kan.

The East Elevator at Western, Neb., is being extensively repaired.

Buckman & Marquardt have a brand new elevator at Avoca, Neb.

M. D. Gallogly, a merchant of Studley, Kan., is buying grain at Guy.

The Updike Grain Co. have a new 70,000-bushel elevator at Stockham, Neb.

A gasoline engine has been purchased for the Jones Elevator at Pratt, Kan.

Arthur Spielman has engaged in the grain and mercantile business at Seguin, Kan.

James Hawley will rebuild the elevator which was recently burned at Potter, Kan.

H. J. Dittenbaugh & Co. have sold their elevator at Washington, Kan., to the Duff Grain Co.

A. D. Johnson of Cheyenne, Wyo., has purchased O. A. Cooper's elevator at Pawnee City, Neb.

Edward Perdue & Co. of Huron, Kan., are to again engage in the grain and coal business there.

W. E. McKibben has purchased and taken possession of H. W. Skinner's elevator at Nortonville, Kan.

E. E. Day, Weeping Water, Neb., has built an addition to his elevator and put in an ear corn dump.

The Westbrook Grain Co. of Albion, Neb., will equip their new elevator with the Hall Grain Distributor.

M. D. Andrews has been succeeded by R. M. Tidball in the grain and coal business at Havelock, Neb.

Geo. Lanning has purchased a half interest in the grain business at Denison, Kan., and the firm is now Coleman & Lanning.

The old Hord & Miller elevator on the B. & M. tracks at Central City, Neb., has been torn down and a new elevator is being built.

J. A. Cramer, Girard, Kan., has purchased the Crawford County Mill & Elevator property. He is fitting up the same and will buy and ship grain.

J. K. Bartoo, Larned, Kan., has sold a half interest in his coal, feed and grain business to Lafe Lee, and the firm is now doing business as Bartoo & Lee.

The item in this column last month to the effect that M. Korth had succeeded to the grain business of Bodewig Bros. at Humphrey, Neb., was incorrect. It was only the implement branch of

Bodewig Bros' business that was purchased by Mr. Korth, who is not in the grain business at all.

The W. H. Suede Grain Co., St. Louis, Mo., has been incorporated with a capital stock of \$40,000 by W. H. Suede, Otto Kohle, Ernest Michaels and Curt Hornhardt.

F. C. Kellogg & Co. of McCook, Neb., are enlarging and virtually rebuilding their elevator. When completed they will have a thoroughly modern and convenient plant.

A recent news item from Ransom, Kan., says: "Our grain men complain bitterly of the scarcity of cars, there being now 15,000 bushels of wheat stored in the elevators and piled on the ground."

R. F. Coates of Wichita, Kan., and Wm. Chatten of the Claflin Grain Co. of Claflin are conducting negotiations with the Commercial Club of Wichita with a view to building a large elevator there.

A. H. Bennett, who recently disposed of his interest in the Capitol Elevator at Topeka, Kan., announces that he will organize a stock company whose first step will be the erection of a 50,000-bushel elevator in North Topeka.

Recent sales of the Barnard & Leas Mfg. Co. in Nebraska include the following: York Foundry & Engine Co., York, one warehouse separator; A. L. Kissinger, Glenville, one No. 1 Little Victor Corn Sheller and Cleaner; W. H. Ferguson, Hastings, one No. 1 Cornwall Corn Cleaner.

H. F. Probst of Bluff City, Kan., informs us that the reported sale of his grain business has no foundation in fact, as he has not sold out nor does he even contemplate doing so. His business friends and customers will find him doing business at the old stand as usual.

H. H. Bartling and sons, E. D. and H. H. Bartling Jr., of Nebraska City, Neb., have purchased the elevator of R. L. Hanks at Brock, and will operate the same in the future. E. D. Bartling, who has been in charge of the firm's elevator at Wyoming, will take charge of that elevator.

It is reported from Wichita, Kan., that a movement is on foot to organize the farmers of that section and build a large cooperative elevator at Wichita. Here all the farmers will ship their grain and the manager will handle it on a commission of 1 cent per bushel and the profits of the business will be divided among the farmers according to the amount of stock they hold.

SOUTHERN.

Filtner & Reid are just completing an elevator at Noble, Okla.

Hubbell Bros. of Bradshaw, Neb., are now located at Oklahoma City, Okla.

A. F. Hatfield & Co. have a 4,000-bushel elevator nearly ready for business at Clyde, Okla.

Jackson & Herington will build a 24,000-bushel elevator in the spring, at Renner, Texas.

Smith Long has succeeded J. D. and Nellie Spencer in the feed business at Paragould, Ark.

An elevator has been completed at Valley View, Texas, by the Cameron Mill & Elevator Co. of Fort Worth.

The Shreveport Mill & Elevator Co., Ltd., Shreveport, La., will rebuild their elevator which recently burned.

G. S. Landis of Kansas City, Mo., contemplates building an elevator and perhaps a corn meal mill at Van Buren, Ark.

A. Waller & Co. will probably rebuild their burned elevator at Henderson, Ky. In the meantime they have rented and are operating the Heilman Elevator.

The Steel Elevator & Warehouse Co. will enlarge their grain plant at Nashville, Tenn. N. A. Duff, president of the Duff Grain Co., Nebraska City, Neb., is also president of this company.

W. O. Brackett & Co. of Sherman, Texas, have installed a new grain separator in their elevator. They advertise that they will thoroughly clean wheat for all who wish it at reasonable rates.

The Kay County Grain & Elevator Co. of Nardin, Okla., has been incorporated with a capital stock of \$2,500. The stockholders are: J. B. Tash, Sherman McClure, T. J. Straghan, A. S. Lantz and W. Treadway. They are building an elevator.

An Illinois man traveling through Oklahoma a couple of weeks ago wrote home an interesting letter from which we give the following extract: At Kingfisher they have a large flouring mill and seven grain elevators. Farmers haul their wheat eighty and a hundred miles to Kingfisher, and they come one hundred and fifty miles to trade. It was a common sight yesterday to see four horse teams, wagons and horses all muddy, bringing a load of wheat to market. Most of the wheat I saw tested, weighed 60 pounds to the bushel and brought 53 cents and 54 cents per bushel. Once in a while, I

was told, a load would weigh 62 pounds to the bushel.

Following are some of the cottonseed oil mills that have recently incorporated or are making improvements: The Farmers' Oil Mill Co., Anderson, S. C. C. F. Cobb, secretary and manager. McKenzie Oil & Fertilizer Co., Atlanta, Ga., incorporated by E. B. Lewis and others. William L. Taylor, Van Buren, Ark. E. Kirk Moore, Hampton, S. C.

The Barnard & Leas Mfg. Co., Moline, Ill., reports the following as among its recent machinery sales in Southern territory: E. Van Winkle Gin & Machine Works, Atlanta, Ga., 1 Cotton Seed Hull Packer; Dublin Oil Mill & Ice Co., Dublin, Ga., 1 Cotton Seed Hull Packer; Smith Grain Co., Little Rock, Ark., 1 No. 1 Little Victor Sheller and Cleaner, shaft, belt, pulleys, etc.; Lathrop Oil Mill Co., Hawkinsville, Ga., 1 Cotton Seed Hull Packer; Southern Cotton Oil Co., Atlanta, Ga., 1 No. 1 Corn-wall Double Acting Sifter; Rolling Fork Oil Co., Rolling Fork, Miss., 1 Cotton Seed Hull Packer.

WISCONSIN AND MINNESOTA.

G. Stob has his new elevator in operation at Raymond, Minn.

Huefner's Elevator at Alma, Wis., has been enlarged and improved.

C. R. Reickhoff has completed his 40,000-bushel elevator at Adrian, Minn.

A. B. Pederson has retired from the Rothsay Elevator Co. at Rothsay, Minn.

A receiver has been appointed for the Kewaunee Grain Co. at Kewaunee, Wis.

Day & Hanser are now doing business in their new elevator at Rubicon, Wis.

A 20,000-bushel elevator is being completed at Gibbon, Minn., by a Mr. Johnson.

A grain elevator is being built at the Wisconsin Central depot, Amherst Junction, Wis.

Thos. Handford is the successor of the grain firm of Olson & Handford at Oconomowoc, Wis.

The Northern Grain Co. and D. L. James are buying grain at Van Dyne, Wis., this season.

Fred Sugden of Stewart is buyer for the Exchange Elevator Co.'s new house at Bird Island, Minn.

The Monarch Elevator Co.'s new elevator, coal sheds, etc., at Clinton, Minn., were completed last month.

Honstain Bros. of Minneapolis have built a 20,000-bushel elevator at Bird Island, Minn., for H. Poehler & Co.

J. J. Ahmann has sold his elevator at Richmond, Minn., to the Interstate Grain Co. John Klaeser remains as wheat buyer.

Bingham Bros., New Ulm, Minn., were recent purchasers of a No. 95 Perfected Elevator Separator from the Barnard & Leas Mfg. Co.

The office of Audley's Elevator at Hartland, Wis., was entered by burglars one night last month, who made an unsuccessful attempt to crack the safe.

The Barnett & Record Co. have been given a contract for placing a 35-inch belt conveyor, with reversible tripper, in the Union Elevator at Minneapolis.

The Walbridge Elevator at Northfield, Minn., is now being operated by the Sheffield Milling Co. of Faribault. D. Hartley, lately of Owatonna, is in charge.

The St. Anthony & Dakota elevator at Warren, Minn., has been closed for the season, and Fred Smith, who has had charge of it, was transferred to Kindred, N. D.

The Barnett & Record Co. are completing an elevator at St. Paul, Minn., for Loftus & Kirwin. It will be of 50,000 bushels' capacity and will seek to supply the local demand, which is large.

Following the close of navigation, the Milwaukee Elevator Co. will close down Elevators A and E for improvements estimated at \$30,000. New and larger engines and boilers will be placed.

The elevator at Mondovi, Wis., recently burned, has been rebuilt. The Skillin & Richards Mfg. Co. furnished the machinery, including Salem Elevator Buckets. A Burrell Gas Engine supplies the power.

A late incorporation is the McHugh-Gardner Elevator Co. of Duluth, Minn., with a capital of \$50,000. The incorporators are G. W. Gardner and Sarah R. Gardner of Duluth, and P. McHugh of Langdon, N. D.

The Northern Grain Co. has recently equipped its Manitowoc Elevator with a new conveyor and three of Skillin & Richards' vessel loading spouts. It is with these spouts that the company has been

able to establish a new time record in loading vessels.

The Milwaukee Chamber of Commerce recently protested against the inadequate fire protection furnished at Milwaukee Elevator E. The C., M. & St. P. officials have decided to give the house such protection that lower insurance can be had by its patrons.

The Northern Grain Co. has completed new grain elevators of capacity of about 20,000 bushels each at Welcome and Derby, Minn. The machinery outfit, Salem Elevator Buckets and Burrell Gas Engines, was supplied by the Skillin & Richards Mfg. Co., Chicago.

Three elevators are now in operation at Lismore, Minn. H. N. Douglass' business is looked after by W. M. Finley, formerly of Ellsworth. R. F. Pembroke, formerly of Adrian, is buying for the Montgomery, Root Co. elevator, while John Van Rossum looks after the Reickhoff elevator.

The Western Grain Co. of Winona, Minn., is building five new elevators at points on the C., M. & St. P. Railroad in South Dakota. S. H. Tromauhauser is the builder. The average capacity of the elevators is 25,000 bushels. Each elevator is equipped with a Fairbanks-Morse Gas Engine, of 6 horsepower.

The Inland Ocean of West Superior, Wis., says: The new Great Northern steel elevator that has been in process of construction all summer is now nearing completion, and looms up far above every other structure on the water front. Ten years ago we used to point with pride to Great Northern Elevator A, with its capacity of 2,000,000 bushels, and tell our friends to behold the largest elevator in the world. That was strictly true, and yet so rapidly are conditions changing at the Head of the Lakes that to-day we have in the new elevator, with its capacity of 6,000,000 bushels, a structure that completely dwarfs the former giants and eclipses by 2,000,000 bushels any other similar structure in the world. The ground floor is 128x370 feet, and it rises 230 feet into the air. The grain in this elevator loaded into cars holding 500 bushels each would fill a train 100 miles long.

IOWA.

A new elevator is being completed at Colo, Iowa.

Ewing & Bump are enlarging their elevator at Delta, Iowa.

Gill & Moore are repairing their elevator at Prairie City, Iowa.

C. H. Stone & Co. are building an elevator at Spirit Lake, Iowa.

Henry Codner has completed his new elevator at New London, Iowa.

Adamson Bros. are building an elevator and corn cribs at Malone, Iowa.

J. F. Dow & Co., Shelby, Iowa, have installed a No. 2 Victor Corn Sheller.

Will Endorf is now taking in grain at the new elevator in Toronto, Iowa.

The Western Grain Co. is erecting corn cribs at Knierim and Osman, Iowa.

W. T. Adams is reported to have sold out his grain business at Chapin, Iowa.

Moore Bros. & Felthouse recently purchased C. C. Green's elevator at West Bend, Iowa.

William Thomas of Sheffield has purchased the Joe Hardie Elevator at Wallingford, Iowa.

O. Connor has completed his elevator at Westgate, Iowa, and is now building corn cribs.

The Hartley Grain Co. have placed an Evans Wagon Dump in their elevator at Hartley, Iowa.

A. A. Mickle is building a new elevator at Atlantic, Iowa. Henshaw & Ringle will operate it.

The Nye & Schneider Co. have placed an Evans Wagon Dump in their elevator at Searville, Iowa.

An elevator is being completed at Mondamin, Iowa, by the Trans-Mississippi Grain Co. of Omaha.

Davis & Anderson of Pacific Junction, Iowa, contemplate building a new grain elevator in the near future.

The Farmers' Elevator Co., Cylinder, Iowa, has been organized and will probably buy or build an elevator.

The A. A. Berry Seed Co.'s warehouse and elevator, near the Burlington Depot at Clarinda, Iowa, is completed.

Erickson & Larson have just completed their new elevator at Roland, Iowa. It is the third one in that town.

The Northern Grain Co. has completed new elevators at Clintier, Dike and Voorhies, Iowa. The elevators are equipped with Burrell Gas Engines,

Salem Buckets and machinery supplied by the Skillin & Richards Mfg. Co., Chicago.

Wm. Addington has purchased the interest of his partner, C. C. Brewer, in the elevator business at Castana, Iowa.

L. G. Beale of Gilman, Iowa, intends to build an elevator this fall to replace the one destroyed by fire September 1.

A 10,000-bushel elevator has just been completed at Stennett, Iowa, by B. C. Ragan of Elliott. Harry Ragan has charge of it.

It is reported that a third elevator will be erected at Kanawha, Iowa, if a site can be obtained on the Iowa Central right of way.

H. H. Smith & Son are now doing business in their new elevator at Boxholm, Iowa, on the Marshalltown & Dakota Railroad.

The Hall Grain Distributor and Overflow Signal has been installed in the new Nye & Schneider Co. elevator at Parkersburg, Iowa.

C. E. Wagar has retired from the grain and stock firm of Skinner & Wagar at LaPorte, Iowa. J. R. Skinner continues the business alone.

J. G. Leary has moved from Lawler to Ionia, Iowa, where he has just completed an elevator and has engaged in the grain and stock business.

The grain firm of Terwilliger & Dwight at Sioux City, Iowa, has been changed to the Terwilliger Dwight Company, with a paid-up capital of \$35,000.

R. F. Buell, until recently in the grain and stock business at Burdette, Iowa, has moved to Livermore, where he expects to go into business again.

Dawson & Hahn have their new 35,000-bushel elevator at Mallard, Iowa, in operation. A 5-h. p. Fairbanks-Morse Gasoline Engine drives the elevating machinery.

John Burke has rented two grain warehouses at Riceville, Iowa. Other warehouses at that point have been converted into elevators, and one new elevator built this fall.

Robert Ivens of Persia, Iowa, has just installed a 25-horsepower Olds Gasoline Engine. He informs us that he is about to enlarge his house, when he will add a sheller, grinder, etc.

Scott Horine has sold his elevator and lumber business at Bayard, Iowa, to H. A. Bechtel of Des Moines. We understand Mr. Horine will take up the insurance business in Des Moines.

The work of remodeling the Interstate Grain Co.'s plant at Schaller, Iowa, was completed last month. The improvements add greatly to the convenience of Manager McKinnon and his patrons.

Renwick, Iowa, has a new grain elevator of capacity of 30,000 bushels, built by the Skillin & Richards Mfg. Co. for the Northern Grain Co. Power is furnished by a Burrell Gas Engine.

W. G. Sherman has built a new brick engine house at his elevator at Riverton, Iowa, and has installed a 25-horsepower Frost Engine and a 30-horsepower boiler. He has also erected a new cob house in connection.

Among a line of 15 new elevators built in Iowa by the Northern Grain Co. are elevators at Dumont, Kesley and Eleanor. The Skillin & Richards Mfg. Co. had the contract for machinery outfit, including Salem Buckets and Burrell Gas Engines.

New elevators of 20,000 bushels' capacity have just been started at Dougherty and Joice, Iowa, by the Northern Grain Co. The Skillin & Richards Mfg. Co. had the machinery contract with Salem Buckets and Burrell Gas Engines furnish the power.

The Northern Grain Co. has completed new grain elevators at Irving and Traer, Iowa, of capacity of 20,000 bushels each. Power is furnished by Burrell Gas Engines. All the machinery, including Salem Elevator Buckets, was supplied by the Skillin & Richards Mfg. Co., Chicago.

The Northwestern Iowa Grain Co. of Mason City, Iowa, report the purchase of Fleming Bros' elevator at Rake, Iowa. This is a 35,000-bushel cribbed elevator, with gasoline power. The new owners of the elevator already have a lumber and coal yard established at that station.

WESTERN.

Campbell & Rogers, grain dealers, of Plaza, Wash., have sold out their merchandise business.

P. P. Tubbs of Fort Collins, Colo., has sold his grain and hay business to A. S. Spaulding.

J. L. Mayfield, banker and merchant at Granada, Colo., has sold out his grocery and grain business.

The Spokane Grain Company, of Seattle, Wash., has been incorporated with a capital of \$10,000.

Bantz & Ray, dealers in grain, feed and fuel at Riverside, Cal., are now occupying fine new quarters. Their grain warehouse is 50x100 feet, built of brick

and has a cement floor. They also expect to install a barley and corn mill.

Bert Weaver of Elkton, Colo., has sold his grain, hay and coal business to Wm. Cadwell, recently of Chicago.

The Barnard-Syphers Machinery Co., of Spokane, Wash., has purchased one No. 93 and one No. 94 Perfected Elevator Separator, made by the Barnard & Leas Mfg. Co.

The Northern Pacific Railway has let the contract for adding 500 feet more to its grain warehouse on the water front in Tacoma, Wash. This has been leased by Balfour, Guthrie & Co., for 20 years. It gives them warehouse capacity for 45,000 tons of wheat.

CANADA.

The Dominion Elevator Company have opened their elevator at Balmoral, Man.

The Manitoba Milling Company has established a flour and feed store at Franklin, Man.

The Dominion Elevator Co. opened their new elevator at Poplar Point, Manitoba, the middle of last month.

Work on the foundation of the Connors Syndicate elevator at Montreal, P. Q., is still in progress. It is expected that more or less work will be done all through the winter.

The machinery of the new Great Northern Elevator at Quebec has been set in motion and is handling the first shipments of grain received from Duluth over the new route.

Alexander, Kelly & Co., of Brandon, Manitoba, have installed a grain-drying plant in connection with their mill. This mill affords a market for much of the damp grain in that vicinity.

Letters patent of incorporation have been issued to the Quebec Terminal Railway, with a capital of \$150,000, to carry on the business of grain dealing and elevating, forwarding, shippers, etc., with headquarters at Quebec. The incorporators are Hon. R. R. Dobell, Hon. John Sharples, E. J. Chamberlin, C. J. Smith and Andrew W. Fleck, of Ottawa.

EASTERN.

Deweese & Bracken are building a grain elevator at Paoli, Pa.

W. H. Nason & Co. have opened a grain store at Spruigvale, Me.

James W. Bicknell will open a grain and feed store at Canton, Me.

J. H. & A. M. Beall of Sutton, W. Va., will install a corn and cob crusher.

The A. H. McLeod Milling Co. has completed a large grain elevator at St. Johnsbury, Vt.

Scott Godwin is opening a grain store at Congress and Bridge streets, Bellows Falls, Vt.

H. H. Capen is to build a brick building 24x50 feet for the storage of grain at Spencer, Mass.

Lawrence Bros. are building an addition to their grain store and grist mill at Falmouth, Mass.

W. W. Butman & Co., dealers in grain and hay at Lynn, Mass., made an assignment recently.

Clyde A. Blake has sold his grain business and mill building at Hill, N. H., to Benj. Calendar.

Chas. J. Andrews has purchased the grain business of Lucy & Lamson at Millers Falls, Mass.

P. W. Eaton & Co. of Williamston, Mass., are building a grain warehouse adjoining their grain store.

Buck & Hatton have purchased the grain and feed business of the late James Dawson at Lebanon, N. H.

D. Masse has sold his grain store at Eastern Avenue and Pleasant Street, Fall River, Mass., to M. Laplante.

W. L. Ayrault of Mt. Morris, N. Y., has engaged in the grain and produce business at East Bethany, Genesee County, N. Y.

Robert McCrea has purchased land along the Boston & Albany tracks in Dalton, Mass., and will build a grain warehouse.

The Swan & Sibley Co. are installing a bucket elevator in the rear of their warehouse at Belfast, Me., for unloading grain from cars.

The Buffalo Elevating Co., Buffalo, N. Y., is planning to build a modern steel elevator to take the place of the burned Dakota Elevator.

The Atlantic Export Co. have had plans drawn for a large grain elevator which they intend building at Thirtieth and Jefferson streets, Philadelphia.

Gustave Bostert, grain and feed merchant at Johnstown, Pa., is putting up a 40x80 foot frame building which he will occupy when completed

about the first of the year. A siding will run to it from the B. & O. railroad.

Pratt & Hansman have purchased the hay, feed, grain and evaporator business which E. G. Palmer has successfully conducted at Chatham, N. Y., for 30 years.

The Knickerbock Milling & Grain Co., Albany, N. Y., has been incorporated with a capital stock of \$75,000. The directors are Theo. H. Waterman, Henry A. Ten Eycke and Geo. A. Thacher.

The Buffalo Transfer Elevator Co. have recently improved their elevator at Buffalo, N. Y., by putting in two transfer conveyors and an additional elevator leg, which were supplied by the Skillin & Richards Mfg. Co. of Chicago.

Caleb L. Woodruff has been appointed receiver for the Genung & Thompson Co., who owned and operated feed, grain and produce stores at Newark, N. J., and other towns in that state. Assets are said to be \$8,000 and liabilities \$14,000.

The Lake Shore & Michigan Southern Railway will building a new steel elevator with a capacity of 750,000 bushels at Buffalo, N. Y. The contract for its erection has been awarded to the Macdonald Engineering Company of Chicago. The elevator will be situated on the Elk Street crossing of the company's tracks. Work will be begun at once, and it will be finished by March 1, 1901, it is said.

OBITUARY

Joseph Blakeslee, a grain dealer at Whitewater, Wis., died recently.

Mr. Orten, of Spellman, Orten & Spitley, grain dealers at Lincoln, Ill., is dead.

Franklin W. Switzer, of Switzer Brothers, grain dealers at Flint, Mich., died recently.

Stephen Nairn, a well-known member of the Grain Exchange of Winnipeg, Man., died recently. He was one of the charter members of the Exchange.

William Clemens, who has been agent for the Great Western Elevator Company at Leonard, N. D., for several years, shot himself November 3 and died instantly.

Albert M. Fiebrantz, who was formerly in the grain business in Milwaukee, Wis., died in that city October 15, aged 73 years. He leaves a wife and three sons.

Schuyler McCormick died at his home in Lakota, N. D., October 21, after a brief illness. He was the son of General Manager McCormick of the National Elevator line, and was the company's agent at Lakota. He leaves a young wife, a bride of but seven months.

James Hargreaves died at his home in Manhattan, Ill., October 17. He formerly resided at Ashkum, and was engaged in the grain business at Cullom, removing later to Manhattan, where he engaged in the same business. He leaves a wife and a small child.

Charles Howe Van Arnam died at Lansingburg, N. Y., October 23, aged 57 years. For many years Mr. Van Arnam was connected with O. Boutwell & Son, dealers in grain. In later years he conducted a real estate and insurance office. He is survived by his wife and one son.

James H. Todd died at De Valls Bluff, Ark., October 14, in his 73d year. For many years Mr. Todd was in the grain business at Wichita, Kan. For several years past he was entirely incapacitated for business because of a total loss of hearing. He is survived by his wife and one son.

James P. McIntosh died October 11 at Toronto, Ont., after an illness of nearly two years. He was 45 years of age. Deceased was the son of the late Peter McIntosh, and was one of the best known grain buyers in Toronto, being at the head of the firm of P. McIntosh & Son. He leaves a widow and five children.

Malcolm Carmichael died at his home in Northfield, Minn., October 24, of typhoid fever. He was a native of Leicester, Mass., and was 37 years old. He had recently entered the employ of the George Harper Grain Company of Minneapolis, and had been traveling for that firm. He leaves a wife, one son and one daughter.

Richard H. Laimbeer died at his home in Brooklyn, N. Y., October 14, of apoplexy. He was 75 years old, having been born in England in 1825. He had lived in this country since 1830, and in Brooklyn since 1849. His father, William Laimbeer, was one of the pioneers in business at the Atlantic Docks, Brooklyn, and built the North Pier there. Deceased was secretary of the Grain Warehouse Company, operating numerous storage warehouses on the Atlantic Docks. He had been a member of the New York Produce Exchange since its

organization. He is survived by his wife, two daughters and a son.

Herman Stutzer, one of the oldest members of the New York Produce Exchange, died suddenly from heart disease November 7 at his home on Staten Island, N. Y. He was 76 years of age. In 1862 he was a member of the Board of Managers of the Produce Exchange, and for many years was a grain and flour dealer.

Michael Byrne died at La Salle, Ill., October 14, aged 69 years. He was a native of Ireland and came to this country when eighteen years of age. Two years later he settled in La Salle. After accumulating some capital he embarked in the grain and lumber business in La Salle, in which he continued until a few years ago. He is survived by one son.

Samuel Friend, a retired member of the Chicago Board of Trade, was struck and instantly killed by a north-bound Illinois Central express train at the Twenty-ninth Street crossing, Chicago, November 4. Mr. Friend was stooping over on the track picking up gravel and apparently did not notice the approaching train. He resided at 2948 Groveland Avenue, Chicago.

William M. Gregg died at his home in Riverside, Ill., November 10, aged 70 years. Deceased had been a resident of Chicago for 29 years and was one of the oldest members of the Board of Trade. He was senior member of the firm of William Gregg & Co. and was active in business until a few months before his death. He is survived by his wife and four children.

Captain Israel C. Weller died at his home in Pittsfield, Mass., November 3, in his 61st year. He was a native of New York state and a union veteran of the war of the rebellion. After the war he established a grain and feed business in Pittsfield, which he conducted until the time of his death. He was known to nearly everybody in Berkshire County as a genial man and the champion story teller of all that region.

Dr. Karl E. Oppen, of Milwaukee, Wis., died suddenly of heart failure at South Bend, Ind., October 23. Dr. Oppen was a native of Germany and was 54 years old at the time of his death. He was formerly a minister of the Lutheran church and afterward of the Episcopalian. A few years ago he retired from church work and became traveling representative for a Chicago grain house. He leaves a wife, three sons and three daughters.

John Hugh McCreery, aged 67 years, died at his home in Allegheny, Pa., October 12. Deceased was one of the pioneer grain dealers of Pittsburg, Pa., having come to that city when a young man and entered the grain business with his brother. They built the first grain elevator in Pittsburg. Mr. McCreery was a member of the firm of Hitchcock, McCreery & Co., Pittsburg, until he retired from business a few years ago. He leaves a widow, two daughters and one son.

Dwight W. Andrews died at Antioch, Ill., October 20, from the effects of a stroke of paralysis received a few days before. He was formerly chief grain inspector at Chicago, and it was during his incumbency of the office that some irregularities occurred which subjected him to harsh criticism. Several indictments were brought against Andrews, but the prosecution was dropped for lack of evidence. Of late he has resided at the Sylvan Beach Hotel in Antioch, a summer resort in which he was interested.

George O. Daniels died at his home in Seneca Falls, N. Y., October 24, of heart disease. He was 69 years old. His father, George B. Daniels, was engaged in the grain business in Seneca Falls when that town was a center of the grain trade. George O. Daniels on coming to manhood took up the same business. About 1860 he engaged in the milling business with Jacob Shoemaker and continued in this business until Mr. Shoemaker died in January, 1900. Mr. Daniels being in poor health closed the mills and lived quietly at home until he died. He is survived by three daughters and one son.

Frank J. Carpenter, treasurer and general manager of Nye, Jenks & Company, grain dealers, Chicago, died October 31 from injuries received the night previous while alighting from an Illinois Central train. Mr. Carpenter, with five other passengers, was riding on the rear platform of the last car of the express train. When the car stopped at the Fifty-seventh Street station, where Mr. Carpenter wished to get off, the end of the rear car was drawn to within a few feet of the station platform. Several of the passengers managed to push their way between the car and the iron railing which guards the end of the platform, but Mr. Carpenter became wedged in between the rail and the car. He was unable to move either forward or backward, and as the train started up immediately he was crushed between the car and the iron railing. He fell to the ground unconscious and was taken home. He never regained consciousness, and died the next morning. His death was caused by internal injuries.

CROP REPORTS

The Hessian fly has appeared in Southern Kansas, in McPherson and Marion counties. Similar reports have come from Central Western Illinois and Western Kentucky.

The heavy rains in Southern Minnesota during October did thousands of dollars' damage to the grain in farmers' stacks. For weeks it was impossible to thrash and much grain sprouted.

The Kentucky crop report shows that fall sown grain has germinated and made very satisfactory growth. There is some damage by fly. Wheat sowing is about 95.5 as compared with last year. The corn crop of Western Kentucky makes a bad showing, by reason of chaffy quality and rotting.

A new feature of the crop situation in South Dakota is the large corn yield. Corn cribs of large size are being rapidly filled, something quite unknown heretofore in that section. Many of the South Dakota farmers have put in winter wheat. They have sufficient hay to winter all their cattle.

Texas farmers are preparing to plant a big acreage in wheat and other grains, much more than usual. In Northern Texas the wheat is now several inches high and in fine condition. Special agents of the Department of Agriculture report that the hurricane of September 8 wrought a damage of about \$500,000 to the corn crop of the state, destroying about a million bushels, or 5.7 per cent of the whole. The loss of rice is estimated at about \$219,000.

The Ohio crop report shows a falling off in the area sown to wheat this year as compared with the fall of 1899. The estimated area seeded for the harvest of 1901 is 79 per cent of last year's acreage, or 2,155,920 acres, and the condition is 81 per cent of an average. The fly is reported to be working on early sown wheat to a considerable extent. Taken altogether, the prospects for next year's crop of wheat are not good. Corn matured well and was husked and cribbed in fine, dry condition. The prospect generally indicates a large product.

Nebraska's 1900 crops of corn, wheat, oats and rye, in the aggregate are larger than in any previous year in the history of the state. The corn crop will hardly exceed 200,000,000 bushels, owing to the fact that all that part of the state west of Hastings and south of the Platte river will produce no marketable corn. The wheat crop is 10,000,000 bushels in excess of that of last year. The oat crop in 1900 was about 8,000,000 bushels less than that of 1899. Other cereals were about the same in 1900 as in 1899. In general the yield is quite satisfactory.

The wheat crop of Michigan for 1900 is said to have been the smallest the state has known for years, aggregating about 10,000,000 bushels, whereas an average crop is about 22,000,000 bushels. The light crop is attributed to the fly. Fall sown wheat shows a condition for the state of 86, as compared with an average. But all early sown wheat is full of fly. The area sown to wheat this fall is smaller than usual; in many cases rye was sown instead. Some fields have been cultivated and re-sown. Corn is yielding 36 bushels per acre. The quality is good, and an unusually large acreage was planted.

The Manitoba wheat crop has turned out much better than was expected. Competent authorities estimate that the province and the territories will have not less than 25,000,000 bushels, which will be about three-fourths of a normal crop. The quality of the wheat thrashed has been very high. Drying facilities are ample throughout the province and the cost of drying is only 1½ cents per bushel. In Alberta, 16 inches of snow fell and at one time there were 8 inches of snow on the ground and the thermometer was 15 degrees below zero, but it all cleared off in time for harvesting and saving the grain.

The Illinois section of the United States Department of Agriculture reports at the close of October that fall farm work has been far advanced, the seeding of wheat and rye having been practically finished. The acreage of wheat sown seems to be below the average, but an unusually large acreage of rye has been sown. In Southern and Central Illinois some damage has been done to early sown wheat by Hessian fly. The average yield of corn throughout the state will be large. In some localities the yield has been disappointing, owing to mold caused by wet weather, worms eating kernels, etc. On the whole, however, the 1900 corn crop is satisfactory.

Indiana's yield of wheat this year was the lowest known in forty years, according to Chief Statistician Conner of that state. Of 2,674,918 acres of wheat sown only 974,034 acres were harvested. The total yield in the state was but 7,840,947 bushels, while an average crop of wheat for Indiana is about 42,000,000 bushels. The corn crop of 1900 was the largest known, the yield being 169,926,921 bushels, as compared with an average yield of about 125,000,000 bushels. The largest

former yield of corn was in 1898, when there were 151,000,000 bushels. The oats crop of the state also breaks the record. While the average yield of oats in that state is about 31,000,000 bushels, this year's crop is 51,102,322 bushels.

From data furnished by the reports of its special correspondents, the Orange Judd Farmer estimates the total corn crop of 1900 at 2,188,018,600 bushels, harvested from 85,276,000 acres, which is slightly below the crop of 1899 of 2,207,473,000 bushels from 83,677,000 acres. The yield per acre is estimated at 25.6 bushels, against 26.4 bushels in 1899 and about 23 bushels in 1898. The crop, though slightly behind that of last year, is a little better than the average of the preceding four years. The United States Agricultural Bureau estimates the crop at 1,929,000,000 bushels in 1900 and 2,078,000,000 bushels in 1899. With the exception of some light and chaffy corn in the territory west of the Missouri river, due to drought, the general quality of this year's crop is high.

DOTS AND DASHES

Iowa is shipping oats to Minnesota for consumption there.

Broom corn is moving from the growers at \$80 to \$90 per ton.

Cincinnati is rejoicing in an increased grain trade since the new rates to the Southeast became effective.

Chicago's October lake shipments of grain were 20,593,112 bushels, being the largest total on record, beating September by 197,880 bushels.

"We enclose \$1 for the 'American Elevator and Grain Trade.' We regard it a valuable paper for the grain man."—A. F. Hatfield & Co., grain dealers, Clyde, Okla.

Philadelphia's grain exports for the year to November 1 were 36,731,035 bushels, or 804,149 bushels increase over same period of 1899. The year's work is expected to break the record.

Portland, Me., at November 1, had more grain on the docks in elevators and cars than ever before. The first grain ships were due to arrive at Portland on November 14, to take the stuff abroad.

Lewiston, Idaho, made the first shipment for this season of bluestem wheat for the Pacific Northwest to Chicago, on October 28. The contract called for 25,000 bushels on private terms. The local market price was 43 cents. The freight to Chicago is 36 cents per bushel.

The first new white corn from the South was received at Baltimore on October 23, by S. M. Lyell & Co., from Northumberland County, Va. It sold on "Change to the Baltimore Pearl Hominy Mills at 50 cents per bushel. Last year the first white corn was received on October 6 and sold for 42 cents.

A farmer in Sullivan County, Indiana, grew a cornstalk sixteen feet in height, but without the sign of an ear. The blades measured fifty inches in length, and roots shot out at every joint up to the eighth. The stalk had twenty-six joints, and at the top, where the tassels shot out, it was three and one-quarter inches in circumference, with thirty-seven branches in the tassel.

"In handing you herewith money order for renewal of our subscription to the 'American Elevator and Grain Trade,' permit us to express our appreciation of the merits of the publication. We find it most valuable in general information and in suggestions for the better carrying on of our business. We would not willingly be without it."—W. O. Brackett & Co., wholesale grain, Sherman, Texas.

On November 1 the Cleveland Chamber of Commerce added largely to the number of its employees at the regular elevators of the city, and now some twelve to fifteen men are at work weighing grain under the direction of the grain committee of the Chamber of Commerce. Some weighing has been done here for several years past; but hereafter all grain handled by members of the Chamber will be accurately weighed by men under oath; and the old system of guessing at "carload" weights will be done away with in Chamber of Commerce transactions.

OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

A. C. Kaiser, Centralia, Ill.
Z. Z. Dodds, La Junta, Colo.
B. F. Black, Dallas City, Ill.
F. A. McKenzie, Quincy, Mich.
William H. Hoppie, Whiting, Ind.
W. D. Gray, representing E. P. Allis Company, Milwaukee, Wis.
A. T. Sitterly, representing The S. Howes Co., Silver Creek, N. Y.

GRAIN DEALERS' NATIONAL ASSOCIATION.

The following program has been prepared for the annual meeting of the Grain Dealers' National Association, to be held at Indianapolis, Ind., on Tuesday and Wednesday, November 20 and 21:

TUESDAY, FIRST DAY, 10 O'CLOCK.

Address of Welcome—D. M. Parry, President Board of Trade.
Response—Warren T. McCray, President G. D. N. A.
Annual Address of President Warren T. McCray, Kentland, Ind.
Report of Treasurer.
Appointment of Committee to Audit Books of Treasurer.
Report of Secretary.
Appointment of Committees on New Members, Resolutions and Nominations.
Terminal Weights—H. J. Caldwell, Earl Park, Ind.
Shrinkage of Corn—Thos. Costello, Maroa, Ill.
The Documentary Tax: Its Repeal—Jas. W. Sale, Bluffton, Ind.
Necessity of Demanding Good Cars—W. Walder, Lafayette, Ind.

TUESDAY AFTERNOON, 1:30.

The Collection of Dues—G. A. Stibbens, Coburg, Iowa, Secretary Grain Dealers' Union, Southwest Iowa.
Benefit of Arbitration Committee—H. B. Dorsey, Weatherford, Texas, Secretary Texas Grain Dealers' Association.
Work of the Western Indiana Division of G. D. N. A.—Secretary E. H. Wolcott, Wolcott, Ind.
Work of Eastern Indiana Division of G. D. N. A.—Secretary J. K. Slack, Muncie.
Work of Northeastern Indiana Division G. D. N. A.—Secretary E. M. Wasmuth, Roanoke.
Work of Western Ohio Division G. D. N. A.—Secretary W. G. Parent, Union City.
Work of Grain Dealers' Union of Southwest Iowa and Northwest Missouri—President D. Hunter, Hamburg, Iowa.
Work of Southeastern Iowa Grain Dealers' Association—Secretary E. L. McClurkin, Morning Sun, Iowa.
Work of the Illinois Grain Dealers' Association—Secretary Mowry, Forsyth.
Work of the Ohio Grain Dealers' Association—Secretary J. W. McCord, Columbus.
Work of the Nebraska Grain Dealers' Association—Secretary A. H. Bewsher, Omaha.
Work of the Kansas Grain Dealers' Association—Secretary E. J. Smiley, Topeka.
Work of the Iowa Grain Dealers' Association—Secretary G. A. Wells, Des Moines.
Work of the Southern Grain Association—Alfred Brandeis, Louisville, Ky.
Work of the Texas Association—Secretary H. B. Dorsey.

Among other subjects which will be discussed at this session are: The most successful way to control track bids; is it possible to control consignments of irregular shippers? Can the country dealers afford to withdraw their support from the National?

TUESDAY EVENING.

A reception will be tendered the visiting dealers in the Assembly Hall of Board of Trade Building by the members of the Board of Trade. It will be a smoker with refreshments and music.

WEDNESDAY MORNING, 10 O'CLOCK.

Promoting Harmony Among Country Dealers—J. A. Carden, Winfield, Iowa.
Pointers for Seed Shippers—Thos. M. Hunter, Chicago.
Contracting for Farmers' Grain—A. H. Bewsher, Omaha, Neb.
Reliable Government Crop Reports—H. S. Grimes, Portsmouth, Ohio.
Cost of Coopering Cars in Kansas—E. J. Smiley, Topeka, Kan.
The National Association's Field of Greatest Usefulness—Capt. M. T. Russell, Des Moines, Iowa.
Buying Ear Corn by the Hundredweight—C. A. Bissell, Antwerp, Ohio.

WEDNESDAY AFTERNOON, 1:00 O'CLOCK.

Avoiding Discounts in Central Markets—W. H. Chambers, Chicago, Ill.
What is Being Done to Stop the Loaning of Bags—P. E. Goodrich, Winchester, Ind.
Miscellaneous Business, report of auditing committee, report of committee on nominations, election of officers, adjournment.

The British steamer Inverness took out of Seattle recently 76,000 sacks of oats, consigned to the United States army at Manila, P. I. This was the largest cargo of oats ever taken from that coast. As the crop on the coast was altogether inadequate to such an unusual export demand, supplies were drawn from the western states. This trade is likely to continue large for some time.

TRANSPORTATION

Ocean grain shipments are slower than they were a month ago, rates having fallen from 4d to 3d from Boston and to 3¼d from New York to Liverpool.

The steamer Olga has been chartered at San Francisco for grain to Europe at 46s 3d, or 50s from Portland. Two other steamships have refused higher figures, 48s 6d and 51s 3d.

Scarcity of ocean tonnage has prevented a free movement of grain through the gulf ports, but for the remainder of the year this movement is expected to assume larger proportions.

The Streator and Clinton extension of the Indiana, Illinois & Iowa Railroad has been completed to Seatonville, and was opened for traffic on October 15. The line west of Seatonville to East Clinton, Ia., and Fulton, Ill., will shortly be opened.

Nearly every grain center on the Great Lakes will have an increased vessel storage capacity this winter. Many new boats of large tonnage have been added to the fleet this year, and nearly all of them will lay up with cargoes for the winter.

The Cincinnati Southern and the Louisville & Nashville railroads have given official notice that rates on corn and oats to southeastern territory have been reduced three cents a hundred. This puts Cincinnati shippers on an equal footing with other Ohio river cities.

Many of the steel boats plying on Lake Erie have left the lakes for the seaboard and will seek ocean cargoes this winter. Among them are the whale-back steamer A. D. Thomson and the barges 127 and 129 and three boats of the International Transportation Company. Lake shipping trade at Cleveland has been reported in bad condition.

A car famine of troublesome proportions has been reported in the Pacific Northwest and Far West this fall. The congestion has centered in Washington, where every available car was loaded with wheat, and the delay in the return of empties caused great inconvenience. Traffic officials of the western roads propose to establish a demurrage charge of \$2 a day after twenty-four hours, loading or unloading.

Continued complaints have been made of the shortage of storage capacity at Buffalo, the elevator men claiming that this condition is brought about by scarcity of cars on roads east of that port. They say that any elevator soon fills up after the cars give out. It has been a frequent occurrence for the largest grain cargoes to be held in Buffalo three or four days before they could be unloaded, resulting in very disastrous delays for vessel owners.

The advance in grain rates from Lake Michigan ports, which went into effect November 1, was 2½ cents. To New York all rail the new rate is 17½ cents, instead of 15 cents, as before. The lake and rail lines' tariffs to New York is 3 cents lower, this being the usual differential. Rates by car ferry lines are the same as all-rail lines, but the cross-lake lines have a differential of 1 cent as against that of 3 cents on the lake and rail shipments.

The formal opening of the new Canada-Atlantic and Great Northern route from Parry Sound to Quebec was celebrated October 24, when a through train was run from Quebec to Hawkesbury over the Great Northern and thence over the Canada Atlantic to Depot Harbor. Regular grain shipments over this route are now being made, and steamships at Quebec connect with the line and take the grain direct to Europe. The new route is intended as a competitor for the business heretofore sent via Montreal.

Lake vessels were in demand during October for grain shipments from Chicago to Buffalo. Rates were 1½ cents for corn and 1½ cents for wheat to Lake Erie ports. The advance of 1 cent in rates on grain from Buffalo to the seaboard, which became effective November 1, was a temporary check on shipments, and rates dropped to 1½ cents for wheat, 1½ cents for corn and 1½ cents for oats. The big steel boats in the ore-carrying trade came in as competitors for the traffic and depressed rates to bedrock, by reason of their enormous capacity.

The five railroads operating between Buffalo and New York placed all their grain business in a pool last September, and on October 26 they notified the grain dealers of New York City that rates would be advanced one cent a bushel November 1, and that no more contracts would be made on the basis of the October rates. As a result of this unexpected announcement a large quantity of grain that was intended for New York went to Philadelphia, and the grain business of New York was correspondingly depressed. The railroads alleged, as a reason for their action, scarcity of cars, and a desire to clear their tracks for the coal traffic. Members of the New York Produce Exchange contemplate

bringing the matter to the attention of the Interstate Commerce Commission. They are also insisting more strongly than ever on the enlargement of the Erie Canal.

The secretary of the Grain Trade Association of the Produce Exchange in New York has posted the following notice: "Charterers are advised, in order that difficulties may be avoided in Avonmouth-Bristol, with full grain charters, to specify that discharges shall be made in accordance with the clause in the American Parcels Contract of 1900, known as the 'new terms' contract."

The advance in eastbound freight rates effective November 1 does not seem to stick. It is well known that large shipments of grain to the East have been made since that date at figures much below tariff rates. Grain shipments are said to have been made by the biggest firms at 3 cents less than the tariff. Small shippers have been loud in their denunciation of this favoritism, but can get no relief. The low rates are explained on the ground that contracts were entered into previous to the advance. It is noticeable that the weaker lines are carrying the bulk of the traffic.

PERSONAL

George Runnels is managing the elevator at Ney, Ohio, this season.

W. H. Ballard is the new agent of the Atlas Elevator Company at Volga, S. D.

Walter Jones is in charge of his father's grain elevator at Morgan Station, O.

Joe Vinatieri is now in the elevator business at Yankton, S. D., with J. M. King.

E. B. Van Alstine is buying grain for the Spencer Grain Company at Mitchell, S. D., this season.

V. R. St. John, of Harvey, Ill., is at Buffalo Hart, Ill., for the winter, buying and shipping grain.

Charles Miller of Havelock, Ia., has removed to Ware, Ia., where he has charge of a large elevator.

Hugh Bone, formerly engaged in the grain business at Decatur, Ill., expects to locate at Crowley, Ia.

E. J. O'Leary of Garretson, S. D., succeeds T. V. Brannan as manager of the grain elevator at Jackson, Neb.

Wm. Schultz is again engaged with L. P. Larson in operating the R. H. Bingham elevator at Sleepy Eye, Minn.

Richard M. Smith, a grain buyer, of Collison, Ill., was married October 24, to Miss Susie E. Spandan of Collison.

David A. Larson, a grain dealer of Pine Village, Ind., recently married Miss Margaret J. Littler of Oxford, Ind.

H. G. Unland, grain dealer, of Emden, Ill., fell while attempting to board a moving train, and sprained his shoulder.

George Shingshang, formerly at Chesterville, Ill., is now manager of an elevator and tobacco warehouse at Janesville, Wis.

Paul Specht, who was formerly in the transfer elevator at Champaign, Ill., is now in charge of an elevator at Brooklyn, Ill.

W. S. Pool of Ohiowa, Neb., has succeeded Frank Howard as local manager for the Central Granaries Company at Wymore, Neb.

Mr. Griner, grain buyer for the Middle Division Elevator Company at Cornell, Ill., will represent the company in New Orleans.

C. W. Ballard, who has been in the grain business in Peru, Ill., for some time, has accepted a position at the stock yards in Chicago.

T. V. Brannan, who has had charge of the grain elevator at Jackson, Neb., for the past year, is now located at Dalton, Ia., in a similar position.

O. E. Field, of the late grain firm of Field & Finnermore of Sidney, Ill., has accepted a position with Aguilar & Morales of Ures, Sonora, Mexico.

Mr. Stonedahl, who has been buyer at Cummings, N. D., for the Farmers' Elevator Company, is now buying for the National Elevator at the same place.

Dory Sabraw, who has been in charge of an elevator at Merrifield, N. D., this season, has been assigned to a southern Iowa town by the same company.

Arthur Yerxa has returned to Minneapolis after a successful season as manager of the State Elevator at Kelso, N. D. The house is now closed for the winter.

W. R. McQuillan has recently been elected president and manager of the McQuillan Grain Company, Cincinnati, O. On occasion of his first visit to the office his friends presented him with a large floral

horseshoe with the word "Success" wrought in red immortelles across it.

Martin Cavanaugh has resigned his position as buyer for the Empire Elevator Company at Bath, S. D., and will take charge of the Farmers' Elevator at James, S. D.

G. F. Briggs of Angus, Minn., where he has had charge of the St. Anthony & Dakota Elevator for the past two years, is now representing the same company at Penn, N. D.

J. E. Stevens, traveling auditor of the Woodworth Elevator Company, has closed the elevator at Courtenay, N. D., and transferred Mr. Watkins, who has been in charge, to Cathay, N. D.

Bert Taylor, who has been in the grain business at Corning, Ia., for five years past, is now manager for Thomas & Thomas, land and emigrant agents, with headquarters at Oklahoma City, Okla.

Frank Howard, who for two years past has been manager for the Central Granaries Company at Wymore, Neb., has resigned to accept a position with the Updyke Grain Company of Omaha.

Ed Driscoll, who has been agent for the Great Western Elevator at Mayville, N. D., is now in charge of the company's elevator at Mapleton, near Fargo. The elevator at Mayville is closed for the season.

T. E. Search, president of the Philadelphia Bourse, T. D. Richardson, Frank De Sousa, J. H. Michener and W. P. Douglass, all leading grain men of Philadelphia, have been visiting the grain markets of Minneapolis.

S. A. McVay, who for many years was engineer at the National Mills, in Parsons, Kan., is now at McAlister, Ind. Ter., where he has charge of Elevator B for the J. K. Davidson Commission Company of Kansas City.

COMMISSION

John Lally, commission grain merchant at Chicago, discontinued business November 1.

A. E. Smith & Co. have discontinued their grain commission business at Cincinnati, Ohio.

J. B. Fleshman & Co., dealers in grain and stocks, have established their main offices in new quarters at the northwest corner of Broad and Chestnut streets, Philadelphia, Pa.

Luehrmann, Kopplin & Co. have been incorporated at Altamont, Ill., with a capital of \$7,000. The incorporators are William H. Luehrmann, F. W. G. Kopplin and A. F. W. Luehrmann.

The Milton Rathbun Company has been incorporated at New York City to deal in hay, grain and feed; capital, \$100,000. The directors are Milton Rathbun, F. J. Lennon and W. H. C. Delano.

The George H. Phillips Company was incorporated October 17 to do business on the Chicago Board of Trade. The capital stock is \$30,000. The incorporators are George H. Phillips, Joshua R. Collins and Daniel Hill.

The W. H. Stuede Grain Company has been incorporated at St. Louis, Mo., to do a general grain commission business. The capital stock is \$40,000. The incorporators are W. H. Stuede, O. Kahle, C. Hornhart and E. Michaelis.

The Spencer Grain Company has been incorporated at Minneapolis, Minn., with capital of \$300,000. The incorporators are: R. F. Troendle, E. H. Tryon, C. R. Vreen, T. O. Phelps, and C. S. Carl, all of Minneapolis. They will do a general commission business.

The MacGill, Smith Company has been incorporated at Baltimore, Md., by William E. MacGill, William Harvey Smith, Thomas Richard Moore, Walter J. King and Henry Hampton Pickett. They will conduct a general brokerage business in grain, stocks, etc. The company is capitalized at \$15,000.

Charles J. Singer has sold his membership on the Chicago Board of Trade. He has been a member since 1875, and from 1877 to late in the '80s he was a prominent speculator and one of that forceful coterie called the "Big Four," the others being John Cuddey, Norman B. Ream and Nat Jones. Since 1890 Mr. Singer has not been active in speculation, but has spent much of his time abroad.

The McQuillan Grain Company has been incorporated at Cincinnati, O., by W. R. McQuillan, president; W. J. O'Dell, vice-president; James Costigan, secretary; James Maxwell, treasurer, and George H. Stapley, director. The capital of the company is \$5,000. W. R. McQuillan, the president, has been in the grain business for twenty-five years and has occupied every position from office boy to manager. The headquarters of the new firm are at Room 514 Chamber of Commerce Building.

FLAXSEED

Forbes Brothers of Whiting, Ia., are said to have cut 607 bushels of flax from a forty-acre field. This at \$1.85 a bushel would be worth \$1,122.95, or a little over \$28 an acre.

Some twelve western plants of the American Linseed Company are about to be equipped with the Grinnell System of automatic sprinklers. Chris. Wall, formerly fire chief of Toledo, O., will have charge of the systems.

Flaxseed advanced 36 cents a bushel in the Chicago market during the first nineteen days of October, reaching \$1.85 October 19. So rapid was the advance that there was talk in Minneapolis of a flax corner. The rise in price seems, however, to have been caused by scarcity of No. 1 seed.

Complaints have been made of overgrading flax in the Minneapolis market. Local oil men have called attention to the fact that grades and qualities have been mixed. The trouble, like that at Duluth, seems to have been caused by flax that had been affected by frost, and by the overgrading or rejected flax.

The revised estimate of the flax crop of the Northwest made by the Commercial Record makes the total crop 12,500,000 bushels, and inclusive of Iowa and the Southwest 17,000,000 bushels. This is a reduction of more than 5,000,000 bushels from the estimate of August last, which credited the Northwest alone with 17,700,000 bushels.

Rejected seed has sold in the Duluth market at \$1.65 to \$1.75, as against \$1.77 to \$1.80 for No. 1. There are but two grades of flaxseed in the Duluth market, all seed which will not pass for No. 1 Northwestern grading "rejected." A movement is on foot for a change in the system of inspection, to be inaugurated before the opening of another season.

Thirty earloads of flax were shipped from Winona, Minn., to South Chicago, October 22. This is said to have been the largest single shipment of flax ever sent out of Winona. The trainload was shipped over the Northwestern Railroad by the Minnesota Elevator Company and the Marfield Elevator Company. The value of the flax was about \$50,000.

Spencer Kellogg is said to be decided to locate his new 110-press linseed mill at New York instead of Chicago, believing that the bulk of the seed for crushing purposes east of Indiana is destined to come from abroad and that a location on the seaboard will be nearest to the eventual seed supply. The Kellogg mill at Buffalo is running full blast, and sold several months ahead.

From August 1 to November 1 there were received at Minneapolis 1,655,380 bushels of flaxseed, against 1,110,270 bushels during the same time last year. The percentage of low grade is much greater this year than last, owing to the wet weather. Prices have steadily advanced to the highest point ever reached, and the amount of No. 1 flax received has not been sufficient to fill short sales.

The Van Dusen-Harrington Company, Minneapolis, has issued a report, compiled from about 1,400 replies to inquiries, showing the estimated yield of flax in Northern and Southern Minnesota, North and South Dakota per acre as follows: Northern Minnesota, 7 to 7½ bushels per acre; Southern Minnesota, 8 to 9½ bushels; North Dakota, 4½ to 5½ bushels; South Dakota, 6 1-3 to 6 4-5 bushels.

The American Linseed Company has completed a large oil plant, with a capacity of 800 barrels of oil a day, on Staten Island, N. Y.; also a steel elevator with a capacity of 1,500,000 bushels of flaxseed. The company has let a contract for a steel elevator at Buffalo, with a capacity of 2,500,000 bushels, to facilitate bringing flaxseed from the West and supply storage during the winter months.

On October 18 the American Linseed Company advanced the price of linseed oil ten cents a gallon. Before noon of that day the price was 60 cents; at noon it was raised to 70 cents. The price in New York the next day was 71 cents. This is the highest figure ever known. The lowest was in June, 1897, when sales were made at 23 cents per gallon. Officials of the company say that the advance was necessary on account of the high price of seed, which sold at \$1.82 on the day the advance was made.

The flaxseed receipts at Minneapolis, Chicago and Duluth October 29 were 876 cars, averaging 700 bushels or more to the car, and worth considerably over \$1,000 per earload, a total of about \$1,000,000 for the day's shipments. The farmers have been rushing their flax to market to get the high figures prevailing. On the day above mentioned Duluth received five times as much flaxseed as wheat, 695 cars of flax as against 138 cars of wheat. Even low

grade seed brings \$1.60 for rejected and \$1.50 and over for the no grade.

Reports to the Duluth Board of Trade indicate that the flax crop of North Dakota is almost a failure. That which was not damaged by rain was spoiled by frost. Very much of the flax coming to the Duluth market is low grade.

Fires - Casualties

The Farmers' Elevator at Sheldon, Ill., was slightly damaged by fire October 26.

The Kendrick Grain Company's warehouse at Kendrick, Idaho, was burned recently.

Coffey & Larkins' elevator at Colman, S. D., burst open recently from an overload of grain.

The elevator at Tripoli, Iowa, was damaged by fire to the extent of about \$500 October 3.

T. H. Wheeler's hop house at Yakima, Wash., containing 1,500 bushels of grain, was burned October 17.

J. H. Thompson's elevator was disabled for a short time recently on account of breaking the engine shaft.

J. W. McMullen's grain elevator at Scott, Ohio, was destroyed by fire November 5. Loss, \$15,900; partially insured.

Lightning struck the elevator of Harry McLaughlin, at Mason and Dixon, Md., October 13, and damaged the roof.

Walter Colvert was found dead in his brother's grain elevator at Attica, Ind. He is supposed to have been killed by the machinery.

Over 13,000 bushels of wheat in the hold of the steamer Tampa, which grounded at Midland Harbor, Wis., recently, were damaged by water.

Harvey Slabaugh, fifteen years old, fell fifty feet from a grain elevator near Peru, Ind., recently and received injuries which will probably prove fatal.

The Santa Fe Elevator, at Galesburg, Ill., was damaged by fire October 22. The plant is owned by James O'Connor and operated by C. A. Johnson.

Aaron Waller & Co.'s grain elevator at Henderson, Ky., was destroyed by fire October 30. Loss, \$120,000; insurance, \$72,500. The business will be continued.

An elevator belonging to the Townsend & Merrill Company, at Hudson, Iowa, burst its sides and let several hundred bushels of barley run out onto the ground.

A large elevator at Clare, Mich., collapsed November 8 and let 20,000 bushels of grain and eight tons of flour fall to the ground. The accident occurred at night.

The Urmston grain elevator at Frankton, Ind., was badly damaged by a fire which started in the machinery in the upper part of the building November 3, at night.

Holmes & Ashbaugh's elevator at Danlap, Ill., began settling and threatened to fall from pressure of grain. The grain was run out onto the ground and the pressure relieved.

The canal boat First National was struck by the steamer Andaste while lying at the Norton Mills in the Chicago river October 30, and 1,000 bushels of her cargo of grain were damaged.

The storehouse of Courtland Adams, a feed merchant at Watervliet, N. Y., was burned October 25, with its contents, consisting of baled hay and oats. The loss was about \$2,500, partially insured.

The new elevator at Potter, Mo., was burned October 24. The building was completed and put in operation about two months ago. It was owned by James Hawley. Loss on building and contents, \$5,000; insured.

Joe Breidinger, a workman employed at the Ingold Elevator, Spencer, Iowa, while at work in the upper part of the building, lost his balance and fell to the bottom of a bin, a distance of thirty feet. His back was wrenched and his right leg was broken.

The Atlas Elevator, at Redwood Falls, Minn., was burned recently and is thought to have been set on fire by an incendiary. It is also hinted that the same incendiary burned the three elevators which previously occupied the same site. An investigation is probable.

Two elevators were burned in a general fire which swept over Minneiska, Minn., October 24. The fire started in a barn, supposedly from a spark from a locomotive, and spread quickly to the business section of the town. The elevator of the American Malting Company was destroyed, with a loss of

\$12,000 to \$15,000, and the Farmers' Elevator, with a loss of \$6,000 to \$8,000. Both were partially insured.

A section of Kramer Brothers' large elevator at Wellington, Kan., gave way October 31, and about 15,000 bushels of wheat fell to the ground. Some of the employes narrowly escaped being caught by the falling grain.

George Schreiber's elevator at West Bend, Iowa, burst open recently and about 1,000 bushels of oats were thrown out, necessitating immediate shipment. This is the second accident of the kind at this elevator within a year.

Hutcheart's seed and grain warehouse at Paris, Ky., was destroyed by fire November 2. A large quantity of grass seed and grains was burned. Stuart's feed house also was damaged. The loss was partially covered by insurance.

McLaughlin & Ward's elevator at Leslie, Mich., was damaged by fire October 20. The mill had been running until 2 o'clock a. m. and fire from the boiler arch communicated to the elevator. It was discovered in time to save the building.

Holley & Smith's elevator at Hackensack, N. J., was set on fire November 4, in the afternoon. The incendiary fastened matches to sticks and thrust them through breaks in the sheet iron. The blaze was discovered by the night watchman and extinguished before serious damage had been done.

Eleven cars loaded with wheat and flax were dinged at Big Stone City, S. D., October 20. The train was running down grade and was stopped by torpedo signal left by a train ahead. The air-brakes were set so suddenly that 21 heavily loaded cars left the track. The cars were badly smashed and the grain was scattered along the track.

The elevator of the Clarion Grain Company, at Clarion, near Mendota, Ill., was burned October 30, with all its contents. The origin of the fire is not known. Henry Bilhorn, who conducted the elevator, lost 5,000 bushels of corn and 700 bushels of oats; Julius Kammerer lost 1,500 bushels of corn, Herman Meyer 2,000, and Veit Bilhorn 1,000 bushels.

W. J. Shibley's elevator at Harrowsmith, Ont., was destroyed by fire October 23. About 4,000 bushels of grain, besides flour and feed, were burned. The grain was the property of Richardson & Sons, of Kingston. The same fire destroyed J. G. Gallagher's storehouses, containing 4,000 bushels of grain. There was a partial insurance on these losses.

The Rothspur grain warehouse, located twenty miles southeast of Tulare, Cal., and owned by G. W. McNear, was destroyed by fire October 13. There were 50,000 sacks of grain in the warehouse, owned by McNear, Kelley & Wilhoit, of the Farmers' Union and Milling Co. and several wheat growers in the vicinity. The property is said to have been fully insured.

A fire which broke out in the elevator of the Plato Milling Company at Plato, Minn., October 16, destroyed both elevator and mill. The loss was total; on mill and elevator, \$15,000; insurance, \$10,000; wheat, \$10,000; insurance, \$5,000. J. H. Rieger, the principal owner of the property, has paid all owners of wheat in store in full, and his loss over and above all insurance will exceed \$10,000.

J. F. Spoon & Company's warehouse and elevator at Janesville, Wis., were damaged by fire October 27. The warehouse was practically destroyed, and the roof of the elevator was burned off. The cause of the fire is not known. The buildings are owned by John G. Rexford, and rented by J. F. Spoon & Co. The loss on contents, including machinery, was about \$1,600; insured. The loss on building is covered by insurance.

A large grain elevator located at Enon Station, near Springfield, Ohio, on the Big Four Railroad, was destroyed by fire October 25. The building was owned by the Big Four Railroad Company and the machinery and grain in store by John Harshman. The fire destroyed 4,000 bushels of corn, 3,000 bushels of oats and some wheat. It was caused by a hot box. Mr. Harshman's loss was fully covered by insurance and he will rebuild at once.

C. H. Stone & Co.'s elevator at Spirit Lake, Iowa, was burned October 13. Fire was discovered about 2 o'clock a. m., and is thought to have originated in the engine room. The supports below were burned out and the building fell from the weight of the grain. The falling grain smothered the fire. The elevator contained 5,000 bushels of flax, 7,000 bushels of barley, 6,000 bushels of wheat and 4,000 bushels of oats, a large part of which was saved. There was partial insurance on building and contents.

Seventy varieties of grain from Australia, France, Italy, Germany, Russia and Belgium have been received by the industrial agent of the O. R. & N. at Spokane, who will superintend planting the grain at the agricultural experimental farm near Portland.

BARLEY

AND MALT

Armour & Co. have added four 60-cylinder barley cleaners to their plant at Chicago.

C. F. Crosby has installed two 60-cylinder barley cleaners in his elevator at Buffalo, N. Y.

Henry Adam, maltster and brewer at Cincinnati, Ohio, will erect an elevator of large capacity.

The Washington barley crop, according to Inspector Wright, is 600,000 bushels, and grades very high.

The American Malting Company has taken out the old barley separator at its Purcell Elevator plant and has put in a new Invincible.

Good barley has been bringing 50 cents a bushel at Utica, Minn., and has been selling at that figure at the rate of three to five carloads daily.

The barley market in California is reported as very dull, with but few sales. Choice bright feed has sold at 72½ cents, but prices on inferior grades are frequently cut. In brewing grades and chevalier there has been very little movement.

The annual meeting of the American Malting Company was held November 8. The first annual report issued since the control of the company passed to the present holders was read and showed earnings of about 2½ per cent on the preferred shares.

The exports of barley from San Francisco from January 1 to October 1 were 2,052,464 centals, valued at \$1,906,924, of which 1,797,660 centals went to Great Britain. For the corresponding period of 1899 the exports were 1,864,081 centals, valued at \$1,996,976.

The elevator of the American Malting Company, on the Kinnickinnic River, near Milwaukee, was wrecked by collision with a steamer some two years ago. The contractors who repaired the building have brought in a claim for \$4,500 and are in litigation over the matter in the United States courts.

The average yield of barley per acre, according to returns by Orange Judd Farmer crop correspondents, is 23 bushels, against 27.1 bushels last year. The total acreage is given as 3,560,000 and yield as 81,815,600 bushels, as compared with 3,575,000 acres in 1899, with yield of 96,732,000 bushels.

The 1900 crop of barley in Gallatin County, Montana, has been of excellent quality and is in demand. Ninety cents per hundred pounds has been paid, which is 40 cents higher than was paid last year and 30 cents below the high water mark of two years ago. It is expected that the price will go to \$1.10 per hundred.

The William Rahr Sons Company is building an elevator at Manitowoc, Wis., to have a storage capacity of 600,000 bushels. It will be of the most modern construction, and with the present storage capacity of the company will give it a capacity of over 1,000,000 bushels, which is probably the largest storage controlled by any malthouse in the United States.

The receipts of malt at Cincinnati during October, 1900, were 89,244 bushels, and shipments 31,413 bushels, as against receipts of 40,467 bushels and shipments of 60,839 bushels in the month in 1899. The receipts of barley during October were 275,337 bushels, and shipments 5,660 bushels, as compared with receipts of 163,825 bushels and shipments of 728 bushels in October, 1899.

The W. H. Purcell branch of the American Malting Company's plant, situated at 24 to 36 Larrabee Street, near Chicago Avenue, Chicago, is running full blast. This house has a malting capacity of 1,700 bushels daily. The elevator has a capacity of 250,000 bushels. The barley cleaner in use at the present time is to be removed and a new one to be installed in its place. Jacob C. Englehardt is the superintendent.

The P. H. Rice Malting Company plant, Chicago, is running full blast at the present time, but the company is experiencing considerable difficulty in getting sufficient workmen to operate the house and elevator. Extensive improvements were made during the warm season. The iron steep tanks have been increased in height and now have nearly double their former capacity; an additional opening has been cut through the wall from the growing floor to the furnace room on the first floor, which will be protected by a substantial iron door. The malt elevator, which is detached from the main plant and has 38 bins and a capacity of 250,000 bushels, has recently been equipped with fire-fighting apparatus, pumps have been cross-connected and a standpipe with hose and connections

on each floor are to be installed at once; new screens are being put on all windows and a supply of metal waste cans have been placed therein. This plant is situated at Cragin, on the C., M. & St. P. R. R., on which road it has excellent facilities. W. P. Rice is superintendent, and M. O. Boyle is foreman.

Talk of a barley corner has been heard of late, and it is attributed to the American Malting Company, though the actual buying and storing have been done by the large elevator interests of the Northwest. The total crop of barley is estimated at 60,000,000 bushels, and that, deducting the Pacific Coast and Dakota barley and the percentage of the grain that is fit only for feed, there will be not more than 29,000,000 bushels available for malting purposes. Adding about 15 per cent for the increase in the process of malting and the entire malt production will be seen to be likely to be under 35,000,000 bushels. The actual needs of the country are 43,000,000 to 45,000,000 bushels of malt, and the production is generally about 50,000,000 bushels, while 36,000,000 bushels of the malt are the requirements of the brewers and distillers of the country. Go a little farther and take into consideration the fact that the stock of barleys and malt was entirely cleaned up from last year, and the 25,000,000 bushels of malt that are generally carried over are not to be had recourse to this year, and it is easy to see what the situation is. While a corner is not probable, yet very much higher prices are reasonably certain to prevail.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.		
Imports—	Bushels.	Value.
September, 1899	None	None.
September, 1900	10,091	\$4,864
Nine mos. ending Sept., 1899.	21,345	9,749
Nine mos. ending Sept., 1900.	28,768	3,954

EXPORTS—		
September, 1899	2,786,410	\$1,341,574
September, 1900	1,309,627	607,115
Nine mos. ending Sept., 1899.	7,891,919	3,970,050
Nine mos. ending Sept., 1900.	10,968,790	5,099,213

BARLEY MALT.		
Imports—		
September, 1899	400	\$318
September, 1900	400	325
Nine mos. ending Sept., 1899.	3,121	2,622
Nine mos. ending Sept., 1900.	3,862	3,973
Exports—		
September, 1899	14,956	\$10,104
September, 1900	30,941	22,491
Nine mos. ending Sept., 1899.	333,123	237,849
Nine mos. ending Sept., 1900.	239,598	175,961

HAY

George Ziegler has withdrawn from the hay firm of Wiggle & Ziegler, Detroit, Mich.

W. W. Butman & Co., dealers in hay and grain, at 111 State Street, Lynn, Mass., have assigned to W. H. Southwick.

For the Buffalo market hay must be packed in 200-pound bales, but for Chicago and St. Louis 70 to 90 pound bales are demanded.

Reports from southern Minnesota indicate that there is a serious shortage in the hay crop there, which, in connection with the shortage in fodder corn, will compel many of the farmers to buy feed for stock through the winter.

The largest single purchase of Tennessee timothy hay this year was made by the Shelton Grain Company at Chattanooga, October 30, and consisted of 2,000 bales of excellent quality from W. L. Ledford, a farmer residing at Raht, Tenn.

The hay crop of Yakima County, Wash., this year is estimated as worth \$1,000,000. A new transportation car, 36 feet long and of 80,000 pounds' capacity, is used in shipping. Alfalfa has sold at \$4 per ton in the stack and \$6.50 to \$7.50 on cars in bales. The alfalfa yield in Yakima County this year is about 50,000 tons.

Samuel L. Erfling of Chicago, a hay dealer, is quoted as estimating the value of the hay crop of the United States at \$500,000,000. He says there are 50,000,000 acres of land devoted to hay production in this country and that the annual crop is about 65,000,000 tons. The only crop of superior value to farmers is corn.

Twenty-one bids were received at the quartermaster's office in Seattle, to be opened October 20, for supplying the government with 2,500 tons of hay and 2,500 tons of oats for shipment to the Philippines. The Washington farmers have demanded such high prices for their forage that bids have been sent in from Portland, Ore., Bismarck, N. D., Minneapolis and St. Paul. It is probable that a large quantity of

forage for shipment from Seattle may be bought outside the state of Washington.

The quality of the Canadian hay crop of 1900 is said to be below the average. No. 1 Canadian hay will be very scarce this season, and much of the crop will grade below No. 2, owing to the unfavorable weather in which it was gathered. Shipments of Canadian mixture to British markets have brought \$21 to \$22, and more in rare instances.

Recent hay contracts given out by the quartermaster's department in the far West are as follows: Galbraith-Bacon & Co., 500 tons, Seattle delivery, at \$15.90 per ton; Brokaw Bros., 500 tons, Tacoma delivery, at \$15.90 per ton; P. J. Fransioli, 200 tons, Tacoma delivery, at \$16 per ton; F. W. Smyth, 500 tons, Seattle delivery, at \$16.25 per ton; W. W. Robinson, 300 tons, Seattle delivery, at \$16.90 per ton.

The New England hay crop this year is estimated at about two-thirds that of a year ago. As it is not customary to ship New England hay to outside points, there will be a considerable shortage there for local consumption, which will have to be made up by importing hay from western points. Prices have advanced in New Hampshire from \$15 to \$17 a year ago, to \$20 to \$22 for second and first grades now.

REVIEW OF CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending October 20 sales of Choice Timothy ranged at \$12.25@13.00; No. 1, \$11.50@12.25; No. 2, \$9.25@11.25; Not Graded, \$8.00@11.25; Choice Prairie, \$8.00@11.50—inside prices for State Hay and outside for Kansas and Iowa. No. 1, \$7.50@10.50; No. 2, \$6.25@8.00; No. 3, \$5.50@6.50; No. 4, \$6.50. Not Graded, \$9.50; Rye Straw sold at \$6.50@7.00. Wheat Straw at \$5.25, and Oat Straw at \$4.50@5.00. The receipts for the week were 4,503 tons, against 4,631 tons for the previous week. Shipments for the week were 95 tons, against 62 tons for the previous week. The market for Timothy Hay ruled firm during the week. The local demand was good and the offerings only moderate. Prairie Hay was rather quiet. A fair inquiry existed for choice goods of Iowa and Kansas, while low and medium grades or State Hay was dull and slow sale.

During the week ending October 26, sales of Choice Timothy ranged at \$12.25@13.00; No. 1, \$11.50@12.50; No. 2, \$10.50@11.25; Not Graded, \$8.00@11.00; Choice Prairie, \$9.00@11.00—outside for Iowa and Kansas. No. 1, \$7.25@10.50; No. 2, \$7.00@8.50; No. 3, \$6.25@6.50; No. 4, \$5.75@6.25. Rye Straw sold at \$6.50@7.50. Wheat Straw at \$5.00, and Oat Straw at \$5.00@5.25. The receipts for the week were 3,988 tons, against 4,503 tons for the previous week; shipments for the week were 44 tons, against 95 tons for the previous week. A very firm market was experienced for Timothy Hay throughout the week, the arrivals being small and the demand good. Prairie Hay was quiet during the early part of the week the offerings being not heavy and the demand only moderate. Later the receipts became smaller and the demand a little more active.

During the week ending November 3, sales of Choice Timothy ranged at \$12.50@13.25; No. 1, \$12.00@12.50; No. 2, \$11.50; No. 3, \$10@10.50; Not Graded, \$8.50@11.50; Clover Mixed, \$9.50; Choice Prairie, \$9.00@11.50—inside prices for State and outside for Kansas and Iowa. No. 1, \$8.00@10.75; No. 2, \$7.00@9.00; No. 3, \$6.00@7.00; No. 4, \$5.00@6.00; Not Graded, \$5.50. Rye Straw sold at \$6.00@7.50. Wheat Straw at \$5.75, and Oat Straw at \$5.00. The receipts for the week were 4,257 tons against 3,988 tons for the previous week. Shipments for the week were 141 tons, against 44 tons for the previous week. The market for both Timothy and Prairie Hay ruled firm during the week. A good local demand existed and all consignments sold readily. Shipping inquiry was light. The arrivals were only moderate, especially of Timothy Hay.

During the week ending November 10, sales of Choice Timothy ranged at \$12.50@13.50; No. 1, \$12.00@12.75; No. 2, \$11.50@12.00; No. 3, \$10.00; Not Graded, \$9.00@12.25; Mixed Hay, \$11.50; Choice Prairie, \$10.75@12.00; No. 1, \$10.00@11.00; No. 2, \$6.50@7.00; No. 3, \$5.50@6.50; No. 4, \$5.50@5.75. Rye Straw sold moderately at \$7.00, and Oat Straw at \$5.25@5.75. The receipts for the week were 3,224 tons, against 4,257 tons for the previous week. Shipments for the week were 76 tons, against 141 tons for the previous week. The offerings of Timothy Hay were quite small during the week. The demand was good and prices ruled firm during the early part of the week with a slight advance toward the close. Prairie Hay was firm. The bulk of the arrivals were from Kansas, but all grades, including State Hay, were salable.

Nye, Schneider & Co. of Fremont, Neb., were given a contract, October 24, to furnish the government 3,000,000 bushels of oats at \$4 cents per hundredweight, delivered at Omaha. The oats go to the army in the Philippines.

Late Patents

Issued on October 9, 1900.

Gas Engine.—Adolph A. Williams, Superior, Wis. Filed Dec. 1, 1899. No. 659,126.

Issued on October 16, 1900.

Corn Sheller.—John Q. Adams, Marseilles, Ill. Filed Dec. 18, 1899. No. 659,839. See cut.

Drying Conveyor.—John C. W. Stanley, London, Eng., assignor to the Cotton Seed Oil Syndicate, Ltd., same place. Filed June 11, 1900. No. 659,771.

Gas Engine.—De Iouson E. Barnard, Beloit, Wis. Filed June 11, 1898. No. 659,911.

Wheat Separator.—Richmond B. Gentle, Yadkin College, N. C. Filed Jan. 30, 1900. No. 659,919. See cut.

Portable Apparatus for Renovating Grain.—Harmon H. Friedley, Indianapolis, Ind., and Frederick C. Crowe, Chicago, Ill. Filed Feb. 2, 1899. No. 659,732. See cut.

Automatic Weighing Machine.—Geo. Hoepner, San Francisco, Cal., assignor to the Union Scale &

Explosive Gas Engine.—Thos. M. Antisell and Frank L. Antisell, Matawan, N. J. Filed Oct. 5, 1899. No. 661,300.

RECENT INSTALLATIONS OF THE INTERNATIONAL SPRINKLER SYSTEM.

PENNSYLVANIA.—Philadelphia: Electric Storage Battery Co. (manufacturers storage batteries), Leicester & Continental Mills Co. (woolen mills), John Wolstenholme & Sons (manufacturers of worsted yarn), Hotel Walton, Quaker City Dye Works, Hensel-Colladay (repeat order) (woolen mills), Smith, Kline & French Co. (drugs), William Steele & Sons (Peter Woll) (repeat order), Estate C. J. Graham, Robert Foerderer (manufacturer of leathers), George W. Smith & Co. (cabinet makers), National Publishing Co., John Gay's Sons, Tuttleman Bros. & Faggen, Germantown Spinning Co., Bernstein Manufacturing Co. (manufacturers of metal bedsteads), Peter Woll & Sons, Greaves Bros., Marks Bros. (repeat order) (department store), John T. Bailey & Co. (manufacturers of bags, rope and twine), J. Kitchenman (manufacturer of carpets), George Lasher, Enterprise Manufacturing Co. (man-

Fayetteville: Ashley & Bailey Co. (manufacturers of silks). Lexington: Nokomis Cotton Mills. SOUTH CAROLINA.—Union: Buffalo Mills (cotton mills). Westminster: Cheswell Cotton Mills. Columbia: Capital City Mills (cotton mills). Laurens: Laurens Furniture Co. Spartanburg: Morgan Iron Works, Spartanburg Warehouse Co. TENNESSEE.—Harriman: Harriman Cotton Mills. TEXAS.—Denison: American Cotton Spinning Co. Roxtton: Roxtton Cotton Oil Co. McKinney: McKinney Cotton Oil Co.

The EXCHANGES

The Minneapolis Chamber of Commerce has barred privilege trading from the floor of the Exchange during regular hours. It is done after hours as a hedge.

The directors of the Chicago Board of Trade have made the Galena Elevator, located on the river between State and Rush streets, a regular house. It is owned by the Chicago Terminal Elevator Company.

A proposition to remove the sixty-day limit on trading in futures on the Chicago Board of Trade was submitted to the members by petition in the form of an amendment to Rule XVI. The amendment was lost by a vote of 329 to 410.

Small commission houses on the Chicago Board of Trade, which have no private wires, have made complaint that the commission rule, which prohibits the granting of special favors, is being evaded by the private-wire houses, which permit large customers doing a stock business to use their wires free of charge in consideration of their stock orders.

Among the standing committees of the Minneapolis Chamber of Commerce for the year ending October 1, 1901, are the following: Coarse Grain and Flax Quotation—D. Webster, T. B. Murray, F. R. Delavan, H. G. Dickey. Elevator Registry—J. D. McMillan, S. A. Harris, William Griffins. Elevator—James Marshall, Samuel Morse, B. H. Morgan.

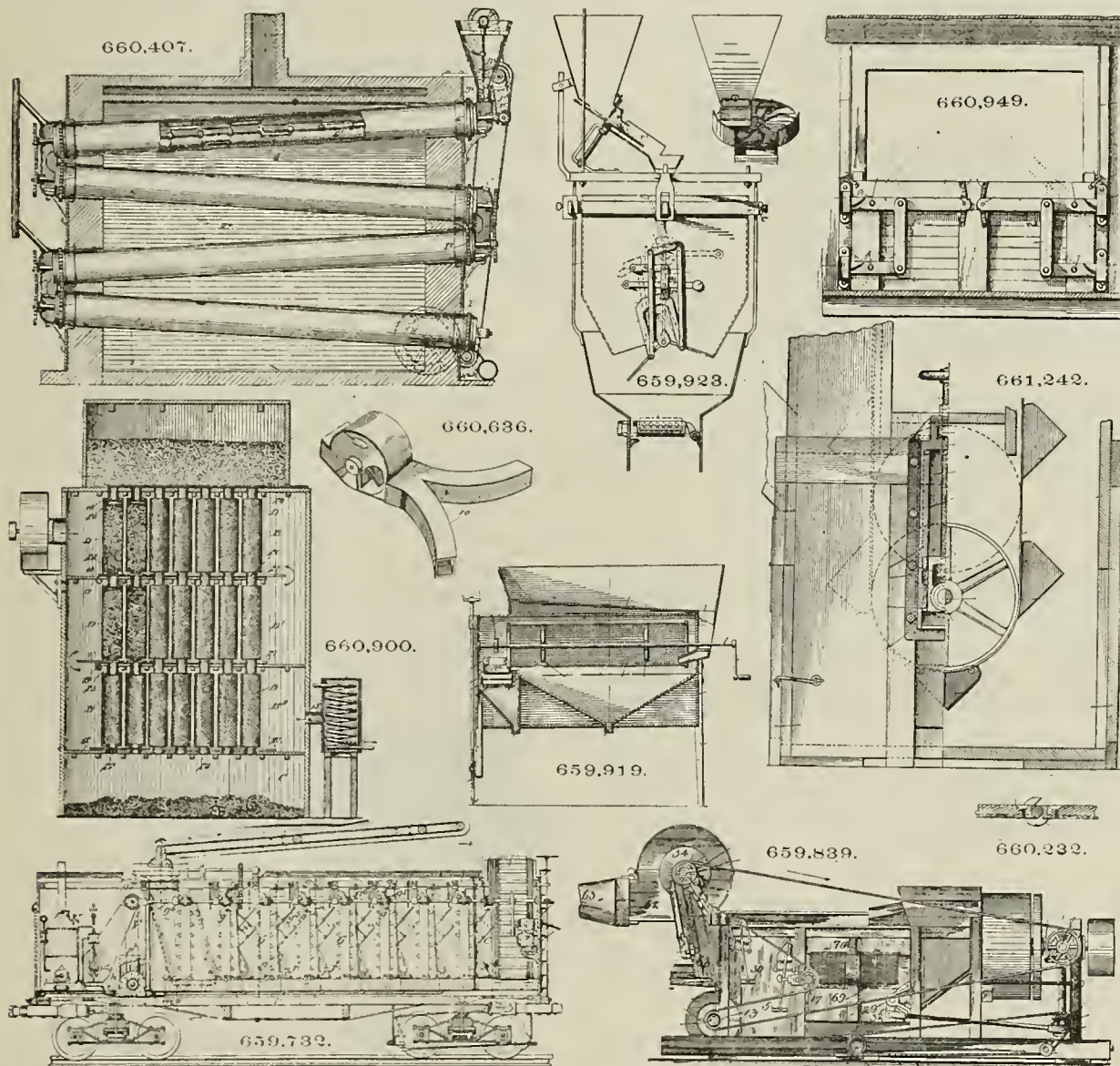
A vote of the members of the Minneapolis Chamber of Commerce was taken recently on the establishment of a new telegraph line in connection with other grain centers. The vote was received by mail, and 169 of the 224 voting signified their disapproval of the proposition to bind the Chamber to a 25-year contract with the proposed Exchange Telegraph Company.

The Chicago bucket-shops have been driven out of the grain business by the quotation rule of the Board of Trade, which renders it impossible for them to get regular quotations. The Milwaukee bucket-shops also have been deprived of their grain quotations by the withdrawal from business of the Chicago bucket-shop which was furnishing them. The new system is working well.

H. Newton Christy, manager of the National Grain & Hay Company, was suspended from the Cincinnati Chamber of Commerce for six months on charges of failing to meet a business obligation, preferred by the Cincinnati Elevator Company. Mr. Christy at once filed counter charges against the elevator company, which will be heard at the expiration of his suspension.

The new Grain and Lumber Exchange building at Winona, Minn., is completed. It is described as first-class in all its appointments, and is occupied by such concerns as the Interstate Elevator Company, the Minnesota Elevator Company, the Western Grain Company, the Marfield Elevator Company, the American Malting Company, and the Grain Dealers' Indemnity Company.

The following agreement has been signed by a committee of the Chicago Board of Trade appointed to assist in enforcing the rules: "Believing that the administration of the Board of Trade has given a very unusual amount of time and labor to the advancement of the best interests of all the members of the Board, and with the hope that we may be of some assistance to it in the future, we hereby form ourselves into an organization for the following purposes: To assist the administration in the enforcement of all rules, and to loyally support all action which it may take hereafter, or has already taken, for the upholding and maintenance of the Board, especially in its fight against bucket-shops. And we earnestly request all members of the Board to assist us in every way in their power with their advice and suggestions. Signed by Carrington, Hannah & Co., Fyffe Bros. & Co., Adams & Samuel, Nash-Wright Company, R. G. Chandler & Co., C. B. Congdon & Co., A. O. Slaughter & Co., Buckley & Co., Counselman & Day, Richardson & Co., F. G. Logan, Finley, Barrell & Co., Jackson Bros. & Co., Bartlett, Frazier & Co., James A. Patten, Hatley Bros., E. Seckel & Co., McReynolds & Co., J. F. Harris, Weare Commission Company, J. H. Wrenn & Co., C. H. Canby & Co., Raymond, Pynchon & Co."



Mfg. Co., Sacramento, Cal. Filed Oct. 2, 1899. No. 659,923. See cut.

Gas Engine.—Harry D. Weed, Syracuse, N. Y. Filed March 24, 1900. No. 659,944.

Issued on October 23, 1900.

Grain Drier.—George Werner and John H. Hiliker, New York City. Filed April 18, 1900. No. 660,407. See cut.

Oat Grader.—Francis E. Walsh, Cedar Rapids, Iowa. Filed March 9, 1900. No. 660,900. See cut.

Issued on October 30, 1900.

Grain Car Door.—John Clarke, Orangeville, Canada. Filed June 23, 1900. No. 660,949. See cut.

Car Loader.—Henry P. Harpstrite, Dalton City, Ill. Filed Feb. 3, 1900. No. 660,636. See cut.

Rice Drier.—Louis W. Haskell, Savannah, Ga. Filed June 7, 1900. No. 660,900. See cut.

Automatic Weighing Scale.—Edward Hanak and Geo. Hoepner, San Francisco, Cal., assignors to the Union Scale & Mfg. Co., Sacramento, Cal. Filed Nov. 13, 1899. No. 660,794.

Issued on November 6, 1900.

Elevator Boot.—Harry J. Flood, Chicago, Ill., assignor to the Chisholm, Boyd & White Co. of Illinois. Filed Jan. 24, 1900. No. 661,242. See cut.

Explosion Engine.—Alfred Boulier and Eugene Boulier, Neuilly, France. Filed July 14, 1900. No. 661,439.

ufacturer of hardware specialties), R. T. Moorhouse (manufacturer of paper), J. S. Thorne, J. R. Jones, Dorian Bros. (manufacturers of carpets), Millbourne Mills, Hess Mills, Thomas Miles building (office building), T. B. Rice (repeat order), Standard Hosiery Co., George Watkinson & Co. (manufacturers of rubber boots and shoes), Dill & Collis, Otto Gas Engine Co. (manufacturers of gas engines). York: Ashley & Bailey Co. (manufacturers of silk). Reading: Nolde & Horst (knitting mills). Natrona: Pennsylvania Salt Manufacturing Co. (manufacturers of chemicals). Spring Grove: W. C. Urner & Co. Coplay: Lehigh Valley Silk Mills. Johnstown: Cambria Steel Co. (manufacturers of steel). Yardley: Cold Spring Bleaching & Finishing Works (Theo. C. Search, president). NEW YORK.—Buffalo: Buffalo Forge Co. CONNECTICUT.—Torrington: Coe Brass Manufacturing Co. NEW JERSEY.—East Trenton: Crescent Belting & Packing Co. (manufacturers of rubber goods) (repeat order). Riverside: Philadelphia Watch Case Co. (T. Zerbrugg Co.), Riverside Metal Co. Millville: Millville Manufacturing Co. (cotton mills). MARYLAND.—Baltimore: Sharpe & Dolme (drugs), American Tobacco Co. (Felguer branch). DISTRICT OF COLUMBIA.—Washington: Stumpf Bedding Co. (manufacturers of metal bedsteads). VIRGINIA.—Richmond: Richmond Locomotive & Machine Works (manufacturing locomotives). Norfolk: Cotton Oil & Fiber Co. NORTH CAROLINA.—Roanoke Rapids: Patterson Textile Co. (cotton mills), Roanoke Mills Co. (cotton mills).

Items from Abroad

Broomhall's at October 23 estimated the world's wheat crop at 2,526,320,000 bushels.

Argentine reports are conflicting, but indicate, as a whole, damage to the growing wheat from frost, excessive rains and cyclones. (This from Snow, who is on the ground now.)

A new feature in the grain trade at Nicolaieff, Russia, is the recent appearance there of grain from such distant places as Veronezh, Tamboy and Samara, and from points on the Siberian Railway.

The secretary of the London Corn Trade Association announces that his committee will be pleased to receive on or before November 30 next suggested alterations for the next revision of contract forms.

The officials of the Rumanian state railways have decided to introduce the American system of classifying grain, and will begin with Moldavia. The object is to stimulate the farmers to grow the stronger sorts of wheat.

Efforts to improve the quality of Russian grain exported, by agreement by shippers to do so, have proved a complete failure at Nicolaieff, because of the repudiation by certain dealers of their own agreements before the agreement went into effect.

The industrial and agricultural protectionists of Germany have come to an agreement on a new tariff schedule, which will be presented to the imperial committee now drafting a new tariff law. It increases the rate on grain to a minimum of 6 marks (\$1.42), and a maximum of 7.50 marks (\$1.75) per quintal (220.46 pounds).

At a meeting of the representatives from the corn trade sectional committee, the Chamber of Commerce of Adelaide, South Australia, the country millers and wheat buyers, the agricultural bureau, and the country farmers, it was resolved that each carrier be made responsible for goods shipped on a through rate, and for the full execution of the freight contract, including the proper delivery of goods at destination.

The Grain Dealers' Association of Rotterdam protest against the present international system of collections by drafts with through bills of lading attached, on the ground that the bills of lading are not a protection to the payers of the drafts. As a change of system, it is suggested that each carrier be made responsible for goods shipped on a through rate, and for the full execution of the freight contract, including the proper delivery of goods at destination.

Official preliminary reports of the 1900 harvest in Russia, dated November 1, indicate that the failure is less material than hitherto reported. According to reports, the wheat crop aggregates 361,200,000 bushels; rye, 778,000,000 bushels; oats, 656,000,000 bushels; and barley, 206,000,000 bushels. The wheat crop is therefore the largest since 1896. Reports come of severe drouth in the wheat areas of Siberia, so that many fields were not harvested at all. The export of grain for the calendar year to November 1 equaled 271,000,000 poods (9,786,352,000 pounds), against 217,000,000 poods in 1899 and 317,000,000 poods in 1898.

John Mathieson of Hampstead, N. W., opens an interesting inquiry in a letter addressed to The Miller of London. He says: "I wonder whether any of your readers can inform me what were the business methods of grain merchants in the small burg towns of Scotland in the days before the railways had been introduced. Nowadays a grain merchant is often only a broker who never really handles the grain; but in the old days, when transport was more difficult, did a grain merchant buy to hold? I want to ascertain the facts, as a matter of literary research, and the British Museum can give me no assistance. Perhaps one of your readers could tell me the modus operandi of a grain merchant in an inland town of 10,000 inhabitants about 50 years ago or more." Geo. Douglass of London is also hunting similar information.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATOR WANTED.

Anyone having a good elevator to sell or trade, please send full particulars to

L. M., Box 11, care "American Elevator and Grain Trade," Chicago, Ill.

REPRESENTATIVES WANTED.

Millwrights, machinery dealers and manufacturers' agents wanted to represent us in their territory, on commission, for the sale of elevating, conveying and power transmitting machinery, mill and elevator supplies. Address

WELLER MFG. CO., 118 and 120 North Ave., Chicago, Ill.

SANDIFUR'S GRAIN CALCULATORS.

Sandifur's Grain Calculators (for elevators and mills) reduce weights to bushels and values at any price. Made in two sections—one for wheat and one for corn and oats. Price, \$3 each, or both for \$5. Remit money with order, and if not perfectly satisfied you can return them by paying express charges and have your money refunded. Elevator men are delighted with them. Address

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A POINTER.

If you are looking for a purchaser for your property, better follow the advice given in the letter below and insert an advertisement in these columns:

St. Louis, Mo., Aug. 15, 1900.

Mr. J. C. Wallace, Lebanon, Mo.

Dear Sir:—We are in receipt of your valued favor of the 14th inst. and contents carefully noted. If we, by any possibility, chance to learn of a party that is looking for a good grain opening with elevator attachment, to be had at reasonable figures, we will most certainly recommend your plant very highly. At times there are parties who are changing their locations, and we think it would be good policy to insert a little advertisement that would cost you a trifle, in the "American Elevator and Grain Trade," published monthly in Chicago by Mitchell Bros. Co. We have at times advertised in the paper; it has a wide circulation and we think if you would thus cast your grain on the Chicago waters it might be returned to you in the shape of a purchaser of your elevator. We mail you sample of the publication so you can see what it is like. With kind regards, we remain

Yours very truly,

J. W. BOOTH & SONS COM. CO.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

OAT CLIPPERS.

For sale, two No. 5 Eureka Oat Clippers, second-hand. Address

OAT CLIPPERS, care Box 10, "American Elevator and Grain Trade," Chicago, Ill.

FOR SALE.

Anyone wanting a good location in the grain business address

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We have a large stock of boilers, engines, steam pumps and pulleys for sale. Write for specifications and prices to

PHILIP SMITH, Sidney, Ohio.

FLAX TOW BRAKE.

For sale, new 16-roll brake, with picker attachment, for making fine, medium and coarse upholsterers' tow. Address manufacturers,

C. D. FOSTER & WILLIAMS, Racine, Wis.

ENGINES AND BOILERS.

For sale, one Atlas 11x16-inch side crank engine, boiler and all fixtures.

One Erie 11x15-inch center crank engine, boiler and fixtures.

One Powell 12x24-inch side crank engine, boiler and fixtures.

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Two Nordyke & Marmon 9x18 and 9x24 two-pair high feed rolls.

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A number of gasoline and steam engines of good make; all sizes.

Feed rolls from \$60 up and all good ones. Also shafting, belting, pulleys, etc., at a big discount. Also grain cleaning machinery.

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All kinds of Bags, New and Second-Hand.
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I will reward any person who will notify me of any such process being used without my knowledge or consent.

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Especially High Grade White and Yellow Corn,
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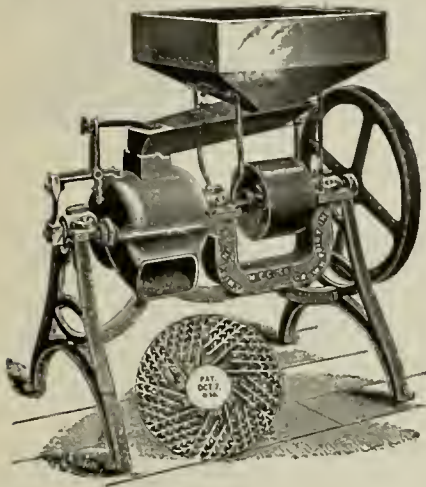
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Let us know what you have to offer.



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For Fine Grinding and Easy Running.

They are all equipped with our Patent Self-Sharpening Burrs, which were awarded First Prize and Medal at the World's Columbian Exposition

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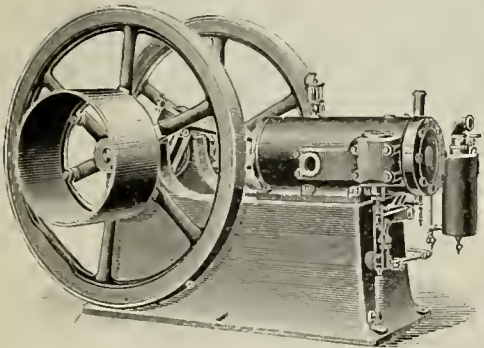
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The "Perfection" with Automatic Valve compels perfect protection and ventilation. Improved and Enlarged. Thousands in use. Nickel plated protector postpaid, \$1.50. Cir. Free. Agents wanted

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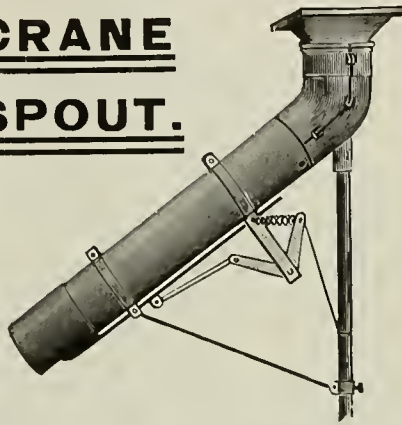
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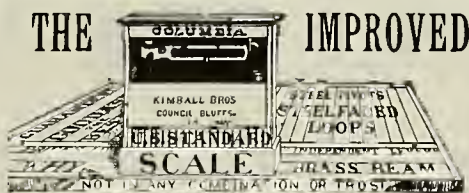
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Can be made to suit nearly any location without change of spouting.

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The Chase Method of CLIPPING OATS

Saves You *Half the Power and Half the Shrinkage.*

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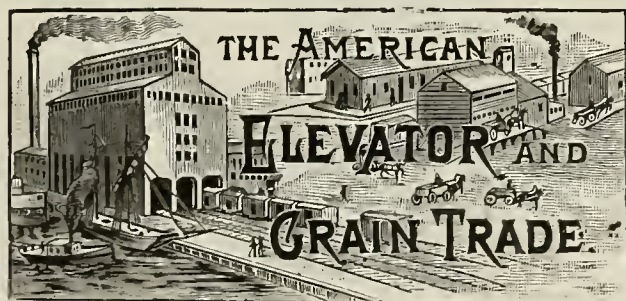
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It will keep you elbow to elbow with your fellow dealers in all association and convention work for betterment of the trade.

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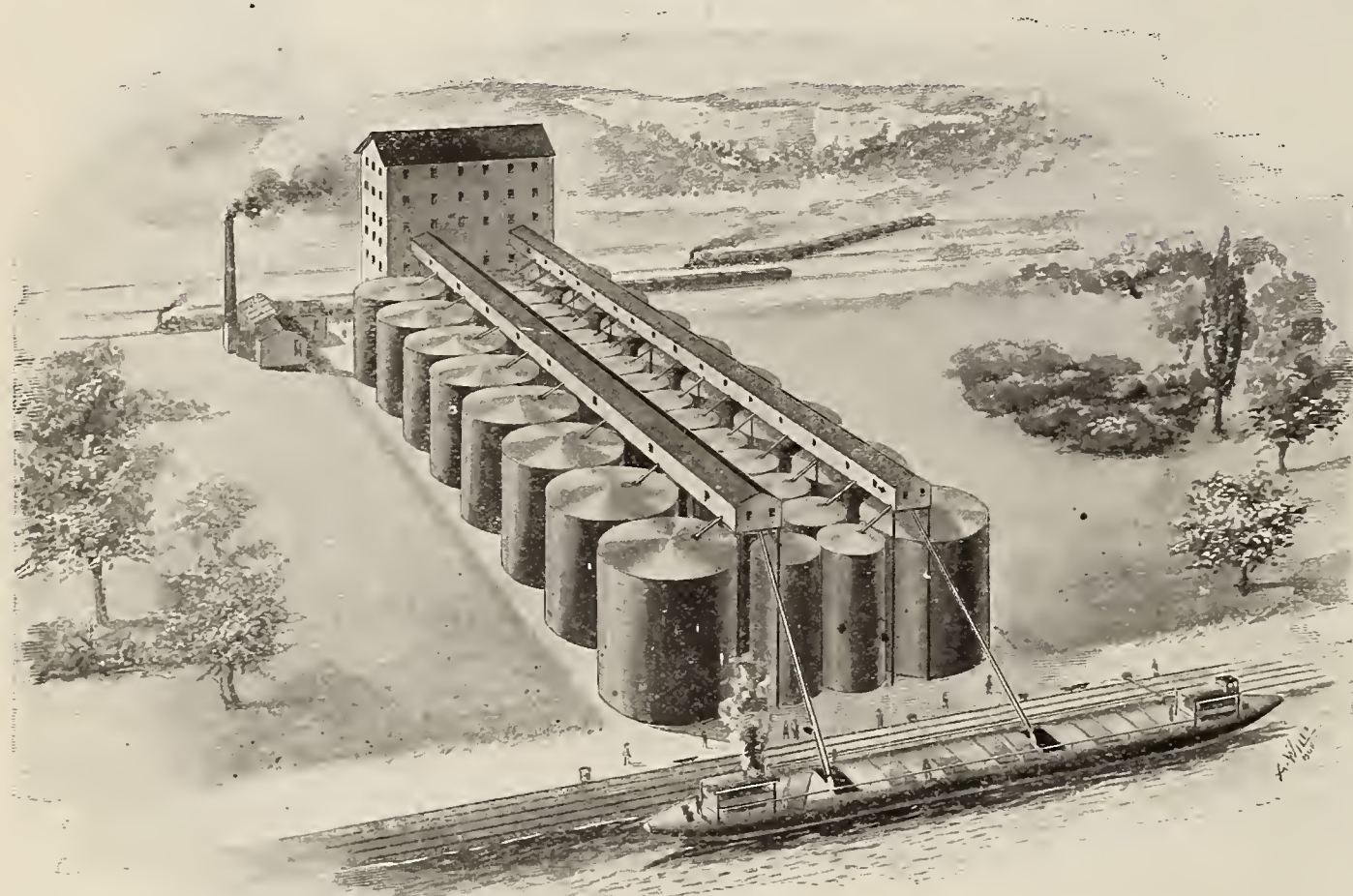
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Of any capacity.

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We Build Storage for Any Commodity of
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We also contract to build complete all kinds of heavy structures, such as Docks, Packing Houses, Public Buildings, Stock Yards, Etc., Etc.



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Superior Terminal El. Co., Superior, Wis. 2,500,000
F. H. Peavey & Co., Minneapolis No. 1. 1,750,000
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Contracting Engineer for Grain Elevators,

Monier Constructions a Specialty. 541 ROOKERY BUILDING, CHICAGO.

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**Grain
Elevators.**

Estimates furnished on application for
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Nebraska City & Ill. Ele. Co., Chicago,	2,000,000
Bartlett Frazier Co.,	1,000,000
H. Rogers Co., St. Louis,	500,000
F. H. Peavey & Co., Minneapolis,	1,000,000
S. S. Linton & Co.,	650,000
S. S. Linton & Co.,	450,000
Interstate Grain Co.,	500,000
City Elevator Co.,	400,000
Security Grain Co.,	400,000
Royal Milling Co., Great Falls, Mont.	100,000
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400 Country Elevators from 10,000 to	50,000

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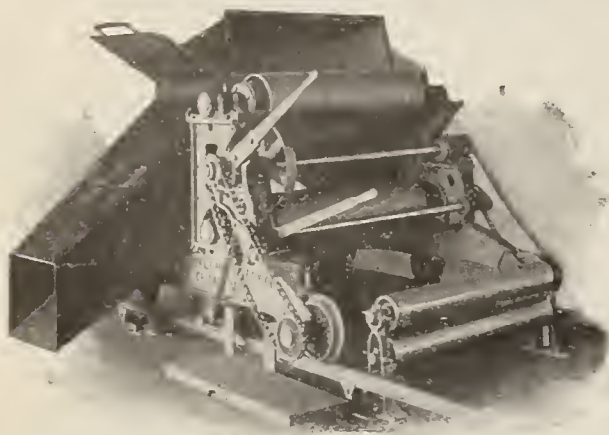
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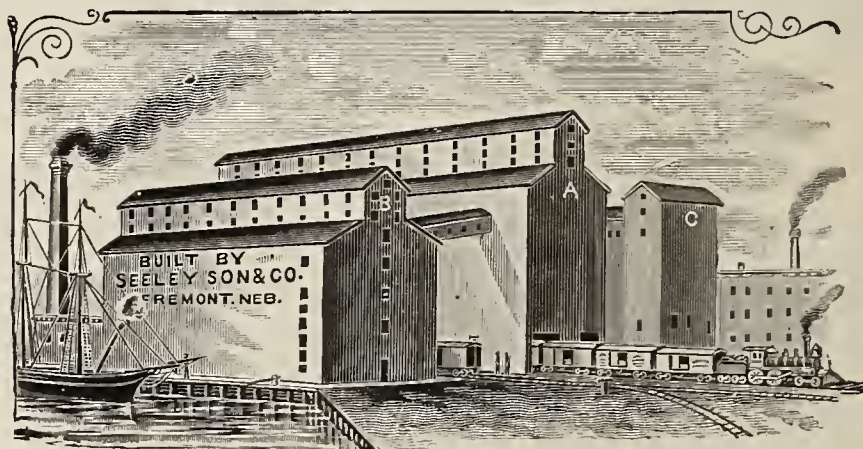
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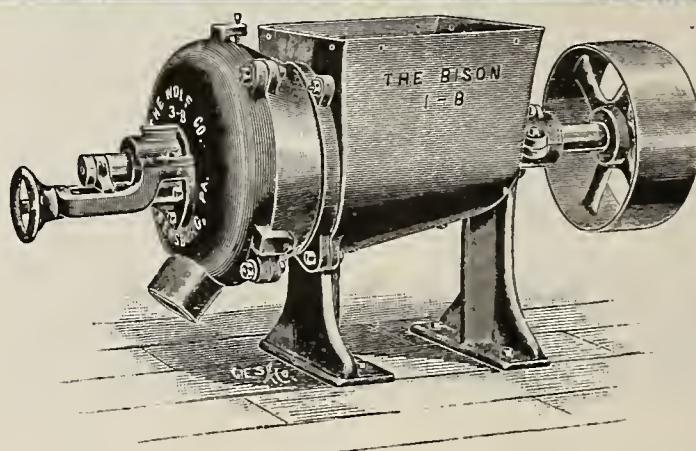
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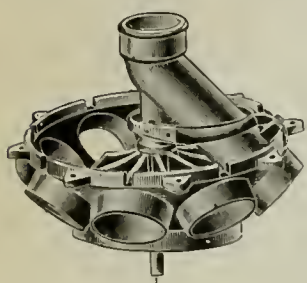
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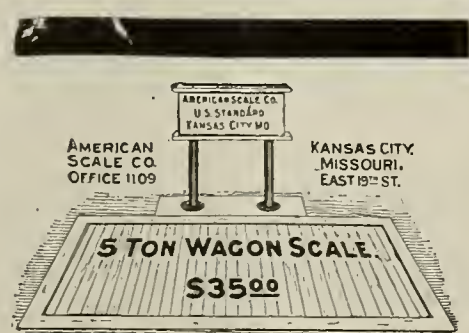
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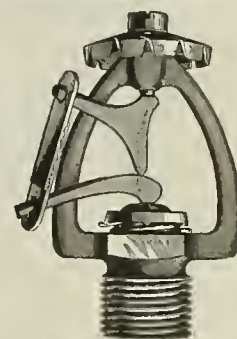
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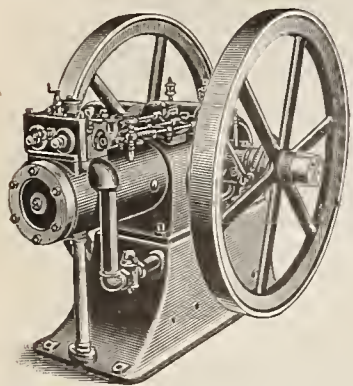
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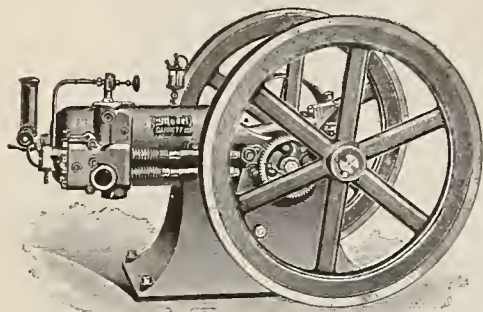
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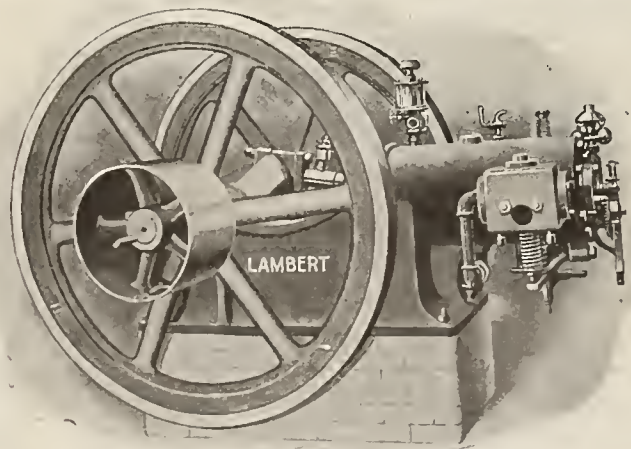
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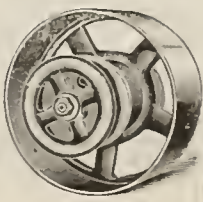
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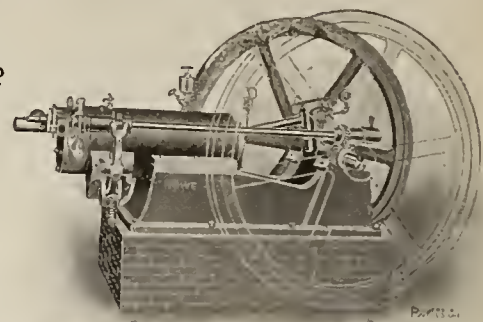


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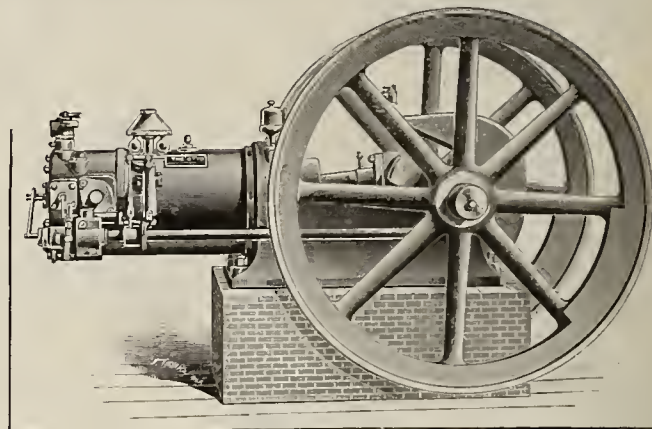
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P. DEM. SCHIZAS

P. Dem. Schizas

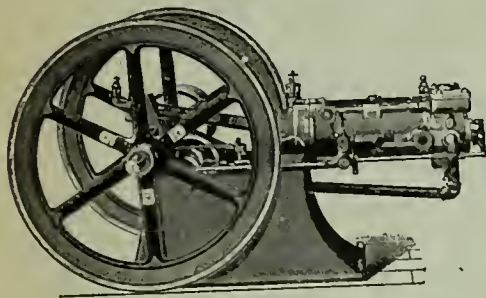
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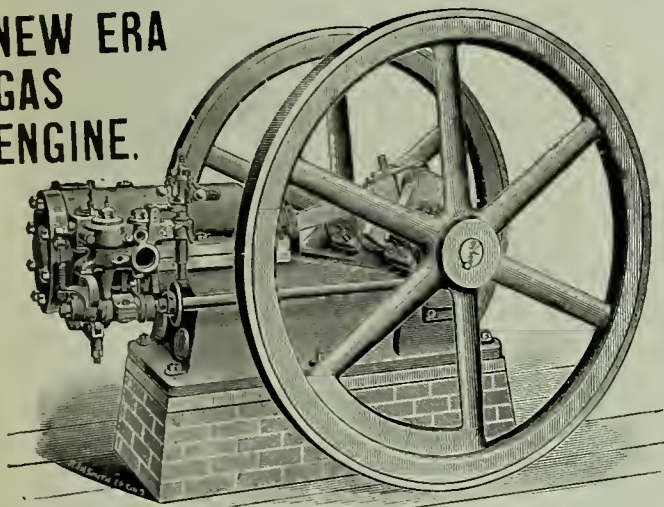
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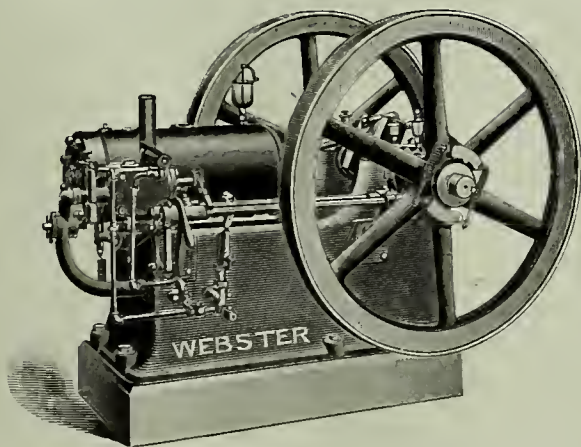
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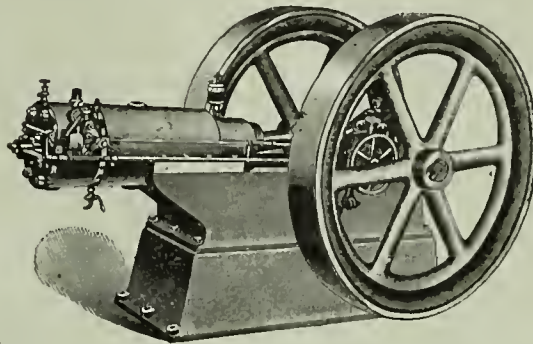
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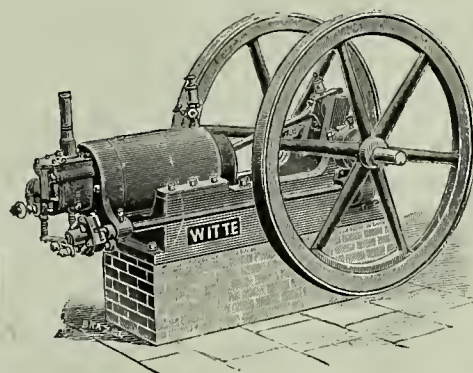
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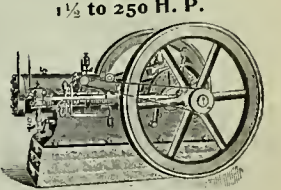
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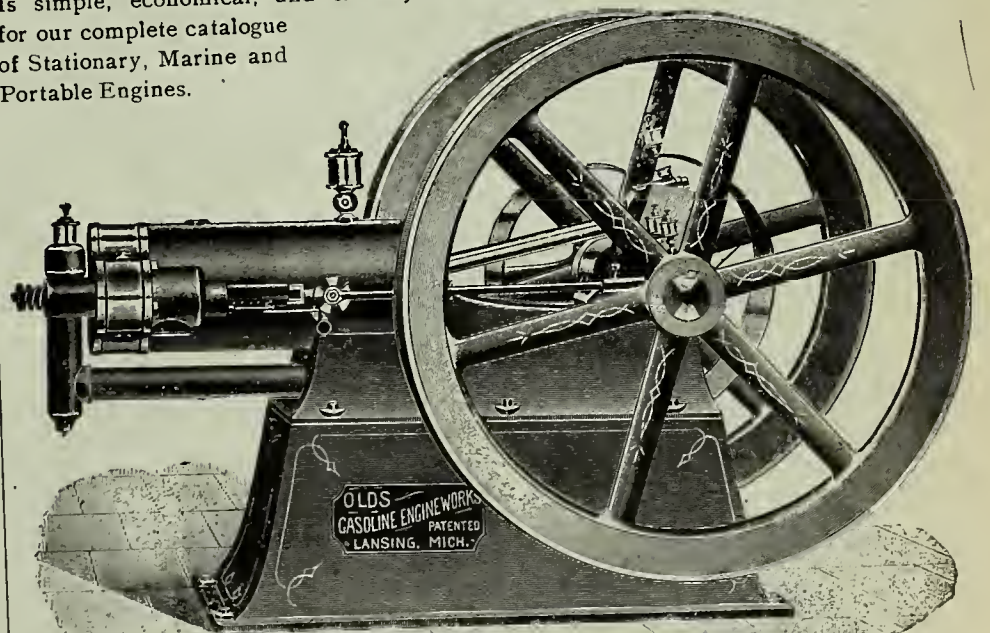
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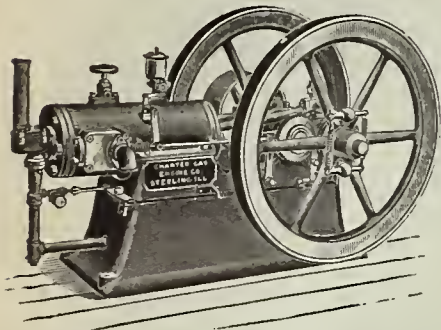
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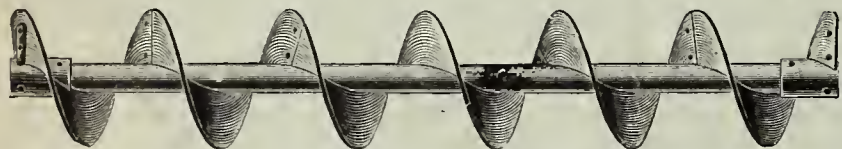
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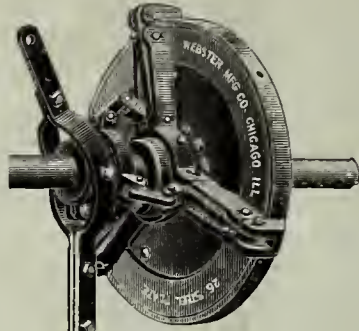
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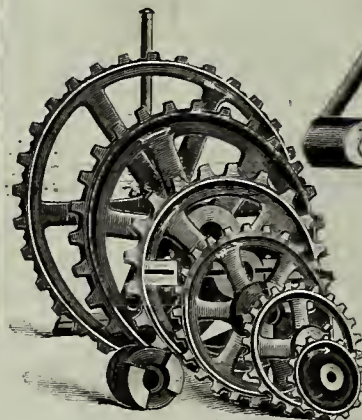
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